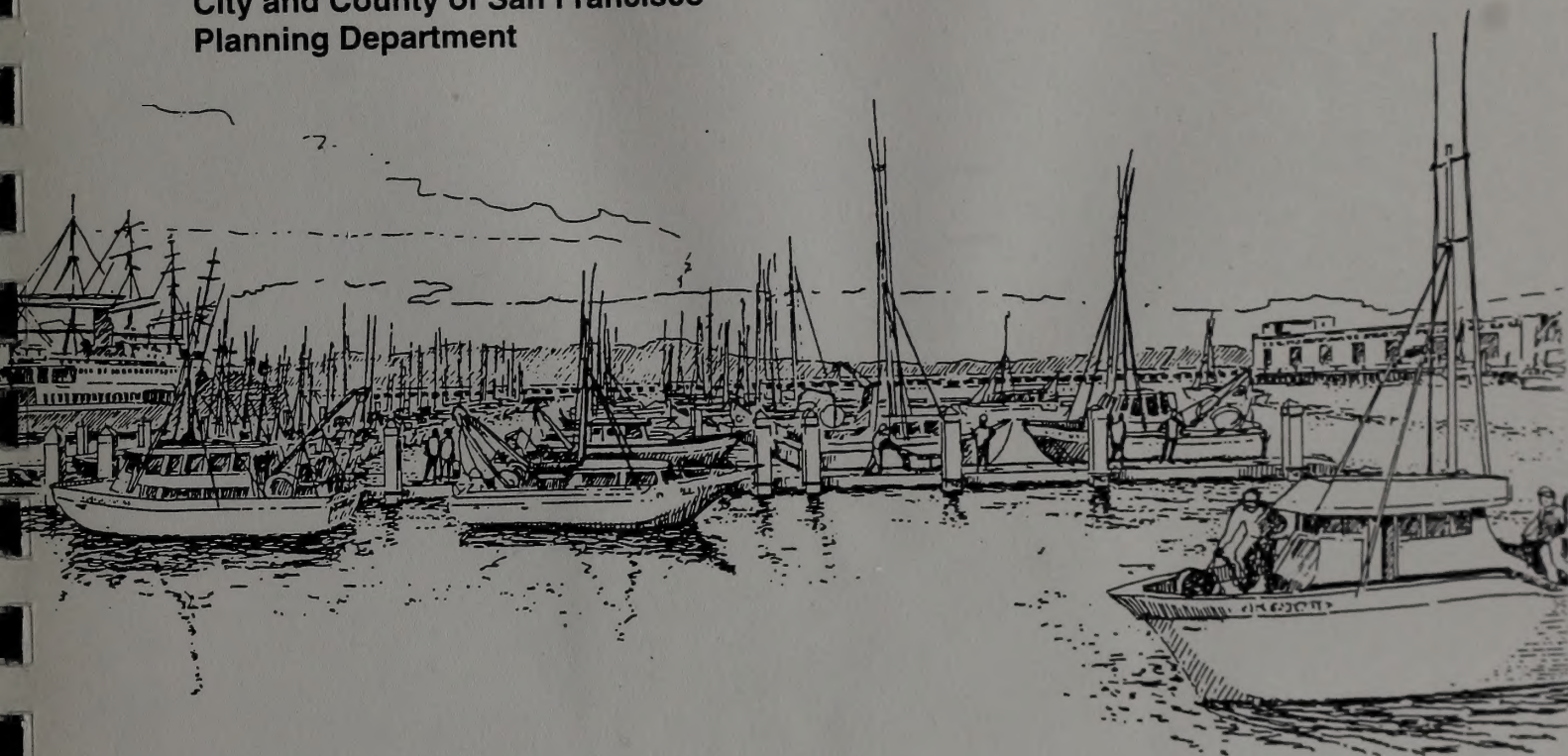


**City and County of San Francisco
Planning Department**



HYDE STREET FISHING HARBOR / PIER 45 SHEDS A&C

Final Environmental Impact Report

**File No. 93.574E
SCH #94073023**

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**Draft EIR Publication Date: April 26, 1996
Draft EIR Public Comment Period: June 10, 1996
Draft Public Hearing Date: June 6, 1996
Final EIR Certification Date: December 12, 1996**



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SAN FRANCISCO
CITY PLANNING COMMISSION
MOTION NO. 14252

ADOPTING FINDINGS RELATED TO THE CERTIFICATION OF A FINAL ENVIRONMENTAL IMPACT REPORT FOR A PROPOSED HYDE STREET FISHING HARBOR AND NEW USES FOR PIER 45 -SHEDS A AND C, LOCATED AT FISHERMAN'S WHARF IN SAN FRANCISCO, OFF OF THE HYDE STREET PIER, AND AT PIER 45 AT THE FOOT OF TAYLOR STREET.

MOVED, That the San Francisco City Planning Commission (hereinafter "Commission") hereby CERTIFIES the Final Environmental Impact Report identified as case file No. 93.574E, Hyde Street Fishing Harbor /Pier 45 Sheds A & C (hereinafter "Project") based upon the following findings:

1) The City and County of San Francisco, acting through the Department of City Planning (hereinafter "Department") fulfilled all procedural requirements of the California Environmental Quality Act (Cal. Pub. Res. Code Section 21000 et seq., hereinafter "CEQA"), the State CEQA Guidelines (Cal. Admin. Code Title 14, Section 15000 et seq., (hereinafter "CEQA Guidelines") and Chapter 31 of the San Francisco Administrative Code (hereinafter "Chapter 31").

a. The Department determined that an EIR was required and provided public notice of that determination by publication in a newspaper of general circulation on July 8, 1994.

b. On April 26, 1996, the Department published the Draft Environmental Impact Report (hereinafter "DEIR") and provided public notice in a newspaper of general circulation of the availability of the DEIR for public review and comment and of the date and time of the City Planning Commission public hearing on the DEIR; this notice was mailed to the Department's list of persons requesting such notice.

c. Notices of availability of the DEIR and of the date and time of the public hearing were posted near the project site by Department staff on April 26, 1996.

d. On April 26, 1996 copies of the DEIR were mailed or otherwise delivered to a list of persons requesting it, to those noted on the distribution list in the DEIR, to adjacent property owners, and to responsible and trustee agencies, the latter both directly and also through the State Clearinghouse.

e. Notice of Completion was filed with the State Secretary of Resources via the State Clearinghouse on April 26, 1996.

2) The Commission held a duly advertised public hearing on said Draft Environmental Impact Report on June 6, 1996 at which opportunity for public comment was given, and public comment was

CITY PLANNING COMMISSION

File No. 93.574E
Hyde Street Harbor Sheds A & C
Assessor's Block: 9900
Motion No. 14252
Page Two

received on the DEIR. The period for acceptance of written comments ended on June 10, 1996.

- 3) The Department prepared responses to comments on environmental issues received at the public hearing and in writing during the 30 -day public review period for the DEIR, prepared revisions to the text of the DEIR in response to comments received that would clarify information in the EIR or based on information that became available during the public review period. This material was presented in a "Draft Summary of Comments and Responses," published on November 26, 1996 that was distributed to the Commission and to all parties who commented on the DEIR, and was available to others upon request at Department offices.
- 4) A Final Environmental Impact Report has been prepared by the Department, consisting of the Draft Environmental Impact Report, any consultations and comments received during the review process, any information that became available, and the Summary of Comments and Responses all as required by law.
- 5) Project Environmental Impact Report files have been made available for review by the Commission and the public, and these files are part of the record before the Commission.
- 6) On December 12, 1996 the Commission reviewed and considered the Final Environmental Impact Report and found that the contents of said report and the procedures through which the Final Environmental Impact Report was prepared, publicized and reviewed comply with the provisions of CEQA, the CEQA Guidelines and Chapter 31.
- 7) The project sponsor has indicated that the preferred alternative for the Fishing Harbor is Alternative A-1 as discussed in the Project Description Section of the Comments and Responses; the modified alternative presented by the Port for Sheds A & C during the comment period includes fish processing in response to input from the Pier 45 Advisory Committee. This Alternative is as shown in Figure 19A of the Draft Comments and Responses. The modified alternative for the Sheds is as described and analyzed in the Draft Comments and Responses Document. These alternatives consist primarily of minor revisions to the Alternatives described in the DEIR and no new impacts were identified.
- 8) The City Planning Commission does hereby find that the Final Environmental Impact Report concerning File No. 93.574E reflects the independent judgment of the City and County of San Francisco, is adequate, accurate and objective, and that the Summary of Comments and

CITY PLANNING COMMISSION

File No. 93.574E
Assessors Block: 9900
Hyde Street Fishing Harbor Sheds A & C
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Page Three

hereby CERTIFY THE COMPLETION of said Final Environmental Impact Report in compliance with CEQA and the CEQA Guidelines.

9) The Commission, in certifying the completion of said Final Environmental Impact Report, hereby does find that the project described in the Environmental Impact Report [and the project preferred by the project sponsor, described as Alternatives A-1 and A-E for Sheds A and C in the Final Environmental Impact Report:

a. Will not have a significant effect on the environment and some features of the proposed project would improve the existing setting for the fishing industry by the provision of much needed facilities and would improve existing water quality.

10) Since the project preferred by the Project Sponsor would have no significant effects on the environment, it is the environmentally superior project under CEQA. Mitigation measures are not required, however the sponsor has agreed to include water quality improvement measures as part of the project as described in the FEIR.

I hereby certify that the foregoing Motion was ADOPTED by the City Planning Commission at its regular meeting of December 12, 1996.

AYES: Commissioners Antenore, Chinchilla, Joe, Lowenberg, Marks, Mills, and Martin

NOES: None

ABSENT: None

ADOPTED: December 12, 1996

REF 387.15 H995f

Hyde Street Fishing
Harbor/Pier 45 sheds A
[1996]

Linda Avery
Commission Secretary

THE CITY OF SAN FRANCISCO
COUNTY OF SAN FRANCISCO
STATE OF CALIFORNIA
DO HEREBY CERTIFY THAT THE
FOLLOWING IS A TRUE AND
CORRECT COPY OF THE
ORIGINAL AS FILED IN THE
OFFICE OF THE CLERK OF THE
SUPERIOR COURT OF THE
COUNTY OF SAN FRANCISCO
ON THE 10TH DAY OF
JANUARY 1900.

ATTEST:
CLERK OF THE SUPERIOR COURT
COUNTY OF SAN FRANCISCO
STATE OF CALIFORNIA

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the County of San Francisco, this 10th day of January, 1900.

CLERK OF THE SUPERIOR COURT
COUNTY OF SAN FRANCISCO
STATE OF CALIFORNIA

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the County of San Francisco, this 10th day of January, 1900.

CLERK OF THE SUPERIOR COURT
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STATE OF CALIFORNIA

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CLERK OF THE SUPERIOR COURT
COUNTY OF SAN FRANCISCO
STATE OF CALIFORNIA

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the County of San Francisco, this 10th day of January, 1900.

City and County of San Francisco
Planning Department

HYDE STREET FISHING HARBOR / PIER 45 SHEDS A&C

Final Environmental Impact Report

File No. 93.574E

SCH #94073023

Draft EIR Publication Date: April 26, 1996
Draft EIR Public Comment Period: June 10, 1996
Draft Public Hearing Date: June 6, 1996
Final EIR Certification Date: December, 12, 1996

Changes from the text of the Draft EIR are indicated by a solid line (|) at each revised section, paragraph, graphic or table.

City and County of San Francisco
Planning Department

HYOJE STREET FISHING HARBOR (PIER 48) SHEOS AAC

Final Environmental Impact Report

Final EIR

SCN 00000000

Final EIR Public Review Period: 1995
Final EIR Public Review Period: 1995
Final EIR Public Review Period: 1995
Final EIR Public Review Period: 1995

Changes from the final EIR are indicated by a shaded area in the
following section: "Changes from the final EIR"

**Fisherman's Wharf
Hyde Street Fishing Harbor & Pier 45, Sheds A and C
Final Environmental Impact Report**

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I. SUMMARY

INTRODUCTION

The following Environmental Impact Report describes the potential environmental impacts of a proposed project off of the Hyde Street Pier, in the Main Harbor, and on Pier 45 / Sheds A and C, in the Fisherman's Wharf Area of San Francisco. The project, proposed by the Port of San Francisco, would add 60 leasable berths/tie-up spaces off of the Hyde Street Pier for commercial fishing boats, and a Fisheries Center with associated meeting space, retail and parking in Sheds A and C. This report addresses those issues that the Planning Department of the City and County of San Francisco, in an Initial Study, determined to have the potential to cause significant impacts on the environment.

PROJECT BACKGROUND (pp 1 to 13)

In 1988, the Port of San Francisco proposed a project in the Fisherman's Wharf harbor that included major renovations to the fish processing industries located in Sheds B and D on Pier 45, and the addition of 88 new floating berths off of the Hyde Street Pier. Environmental review was undertaken and a preliminary negative declaration published. Extensive public controversy caused the Port to withdraw consideration of the project. In October of 1989, the Loma Prieta earthquake did substantial damage to a portion of the Hyde Street Pier and all of the Sheds on Pier 45. Sheds A, B and C were closed and the tenants who were fish processors moved to Shed D, Fish Alley and other Port facilities. A CEQA Statutory Emergency Exemption for repair of the earthquake damage and restoration of the fish processing facilities was issued by the Planning Department's Office of Environmental Review in November of 1989. The Port's plans for restoring the sheds for fish processing uses were examined, and it was found that the amount of space allocated to fish processing and related circulation in Sheds B and D, after completion of earthquake repairs, would be essentially the same as the amount of space that existed for those uses prior to the earthquake; thus, an emergency exemption was applicable.

The restoration of the sheds was primarily funded by the Federal Emergency Management Agency (FEMA); work began in 1992 and was completed in the summer of 1995. As of

November 1995, occupancy of the fish processing sheds was 80% complete. The sheds have been seismically reinforced and the damaged utilities replaced and brought into conformity with current codes. The sewer and water lines, drains, traps, and sinks that existed in Sheds B and D prior to the earthquake were antiquated and inadequate for industrial use. The restored fish processing facilities were designed and built to meet the current rigorous health, safety and performance standards for the handling and processing of fresh fish. The Port's intention was, and continues to be, to accommodate the fish handling industry in the most modern, sanitary, and attractive facilities possible.

The existing 116 leased spaces for commercial fishing boats in the harbor is located at Wharves J 3, 4, 5, and J 7, 8, 9, 10 which are on the inner and outer lagoons on the landside of the main basin. Please see Figure 1S that shows these areas. The existing berths available for lease by the Port in the lagoons at Fisherman's Wharf are 100 percent occupied, and there is some demand for transient berthing and for boats 40-50 feet in length which is currently unmet.

A breakwater, which shelters the entire harbor from Pier 45 to Hyde Street, was constructed with U.S. Government funding in the early '80's. The Hyde Street Pier was originally constructed in 1922 as a ferry pier. A major portion of the Hyde Street Pier is leased by the Port to the National Park Service (NPS) for the National Maritime Park. Pier 45 is located across the harbor (in an easterly direction) from the Hyde Street Pier.

PROJECT DESCRIPTION (pp 1 to 25)

The Port has three overall objectives for this project: to construct a harbor that can accommodate the unmet demand for berthing of the existing commercial fishing industry vessels and that would improve the convenience, safety and efficiency of harbor operations; to provide needed harbor service facilities for the boat operators and their crews; and to provide for the public and visitors uses in Sheds A and C on Pier 45 that are complimentary to the fishing industry operations and to the Fisherman's Wharf area and are accessible to the public and to visitors.

Hyde Street Fishing Harbor

The proposed Hyde Street Fishing Harbor would include reconfiguration of the east side of Hyde Street Pier (located to the west of Pier 45, across the main basin) to allow for the construction of

Figure S1 Existing Harbor Area

I. SUMMARY



MOFFATT & NICHOL AGS INC KUAN HENMI

facilities for a total of 60 boats (see Figure 6); there would be 40 permanent floating berths and 20 side tie/stern tie spaces. This would increase the number of leasable spaces in the harbor area to a total of 176 spaces. An alternative layout of the berths was introduced during the comment and response period, shown as Figure 19A on page 178a. This design option would allow added space for boat traffic between the floating berth and Pier 45.

Some surface area Bay coverage, and Bay fill, as well as dredging and pile driving, would be necessary to create the floating berths and supporting facilities. Reconstruction of the east side of Hyde Street Pier would include the removal and relocation of the existing rock fill and replacement of the timber pier structure with concrete piles. Approximately 22,723 square feet of additional coverage/fill (including 270 cubic yards of supporting piles) in the Bay and about 9,475 square feet of additional coverage / 715 cubic yards of fill in the Shoreline Band would be required to construct the pier extension and berthing spaces. Of that total, the new berthing system would consist of permanent floating berths with separating floats representing about 17,700 square feet of Bay coverage, supported by a concrete guide pile berthing system having 53 new 24-inch rectangular concrete piles; this would represent 270 cubic yards of fill in the Bay.

The new vessel facilities would include the following features: berths would be enclosed on two sides by floats with encased foam pontoons that would ride slightly below the surface of the water; a floating barrier would be provided on the west side of the berthing closest to the Hyde Street Pier and Aquatic Park; the westernmost float would be fitted with a flexible "skirt" which would eliminate gaps between floats and provide a measure of water quality protection. (See Figure 7); a single security gate would be located at the shore end of the pier; there would be lighting, electrical power, water and fire protection systems, and deck boxes for each berth. Runoff would be collected in gutters located along the pier edge or in a central depression, to direct storm water to an oil-water separator before disposal to the Bay. A single security gate at the end of the pier would limit access to the pier and floating dock to permitted boat operators and harbor personnel.

Harbor Service Facilities

The additional new harbor service facilities designed to serve both the new and existing berths would be located partially on new fill, described above under Hyde Street Pier reconstruction. Facilities would include: a work dock; 3000 square feet of public access provided at the foot of the new pier; and a restroom of 200 square feet near the fueling area for use by fishermen. The

existing fuel station building of 420 square feet, now located on a pile-supported pier, would be retained and the existing fuel dock area of 1,450 square feet would be provided with lighting and oil spill containment equipment. A new underground replacement fuel delivery pipeline (140 feet long) from the location of the new tanks (not a part of this project) south of the seawall to the fuel dock would include automatic shut off features, a leak detection system, remote operated shutoff switch, and pressure sensitive valves. A vessel sewage pump-out station would be installed adjacent to the fuel dock area with a 20 gallon per minute (gpm) pump-out capability directly connected to the City's sanitary sewer system. The dock area would have a central depression to direct storm water to the oil-water separator prior to disposal to the Bay. A 40 square foot oily waste disposal facility would be provided in a clearly marked location in the working area and at an existing facility along Fish Alley.

Parking for 21 vehicles to be used by the fisherman, is proposed over existing land and/or over relocated fill. Additionally, 24 parking spaces would be provided in the location of the Bell Smoked Fish building at the backside of the building at 490 Jefferson. About 4,300 square feet of building structure would be demolished to make room for this parking.

Pier 45 / New Uses in Sheds A and C

The Port is proposing to develop uses for Sheds A and C on Pier 45 which would be complementary to the fishing industry. These two sheds contain approximately 140,000 square feet of ground floor area and space for a mezzanine of about 50,000 square feet. Sheds A and C, on the east side of Pier 45, are adjacent to the fish processors' located in Sheds B and D (the fish processors would not be relocated as a result of this proposal). The three alternative uses under consideration are: a Fisheries Center, a Conference Center, or an Education Center. During the Comment and Response period, the Pier 45 Advisory Group revised the preferred Fisheries Center use to include an estimated 32,000 sq. ft. of fish processing space in Shed C (see Figure 8).

Shed C would also include about 18,000 sq. ft. of storage space for the fishing industry and 30,000 sq. ft. of truck access and truck turnaround space inside the Shed. There would be: 40,000 square feet of Visitor Center space in Shed A dedicated to displays and exhibits to promote public education of the fisheries and seafood industries and the marine environment.

Maritime related office space of 10,000 square feet could be located in Shed A. The Pampanito would continue to be moored along the east side of Pier 45. Public access would include 20,000 square feet of Shed A and 25,000 square feet of Shed C, on the pier apron; this would provide a promenade along the eastern water's edge of Pier 45. There would be 108 parking spaces (20,000 sq. ft.) located inside Shed A for the commercial fishing industry. The existing 68 spaces on the forepier would remain. Truck loading docks would be reconfigured in the "valley", but no parking for Sheds A or C would be permitted in the "valley" to minimize conflicts with commercial fish trucks.

Approvals Required (pp 26 to pp 32)

Approvals would be required from the City Planning Commission, the Port Commission, the Bay Conservation and Development Commission, and the US Army Corps of Engineers. In addition, review of the project by the State Lands Commission, the Regional Water Quality Control Board, California Department of Boating and Waterways, and the Coast Guard, would also occur.

The Project would require an amendment to the Northeastern Waterfront Area Plan of the Master Plan of the City and County of San Francisco which designates hotel, commercial office and residential uses on Pier 45. It would also require Conditional Use Authorization from the Planning Commission for non-maritime uses (meeting facilities, retail, and food service) in the Northern Waterfront Special Use District 1.

ENVIRONMENTAL EFFECTS

Land Use (pp 35 to pp 38), Zoning (pp 38), and Bay Fill (pp 114- 115)

Land uses within the project site, and fishing-related uses in particular, would not be substantially altered by the proposed project. The potential to lease berthing and dock space to fishing vessels would allow more control of fishing vessels in the harbor and would minimize the number of rafted and double or triple-tied vessels. The number of commercial fishing vessels in the harbor is not anticipated to grow substantially based on the declining volume of fish landings since 1988. The truck-based fish-trading activity that occurs on Jefferson Street is not an operation controlled by the Port and would not be expected to change due to the project.

Proposed uses on Pier 45 would include activities new to Sheds A and C, but would be designed to be compatible with fishing- and/or visitor-related activities in the vicinity. These uses are not expected to disrupt or divide the physical arrangement of an established community, nor substantially change the character of the vicinity.

There would be approximately 22,723 square feet of additional Bay fill in the form of Bay coverage from the berthing system, and 715 cubic yards of solid fill for the shoreline/pier improvements. There would be 2,180 square yards of fill removed and 48,000 square feet of improved public access as a part of the project.

Water Quality (pp 111 - 123)

Ongoing activities which have been identified as potentially causing water quality impacts to the project area and the adjacent Aquatic Park include the following: fish handling and processing activities; potential fuel spillage and leakage (including bilge water) from the vessels, fueling activities, equipment failure, and maintenance activities; the presence of commercial fishing and other vessels, either permanent or transient; pier and boat deck runoff and washdown discharged directly to the Bay; litter and trash generated by harbor users and visitors; effects of dredging, filling and other construction activities on Bay water quality. All of these activities have been ongoing in the project vicinity for decades.

Each of these activities was studied, and is discussed in the EIR in terms of the likelihood of their occurring at a more intense level as a result of the proposed project, and their potential to affect Bay water quality, based on existing and historical water quality conditions. Results of the studies include: there is no indication of a relationship between the data on levels of coliform in the harbor waters and fish landing data or fish processing activities; other sources of coliform bacteria, such as wet weather sewer overflows, are known to be present in the project area; present fish processing and waste handling practices indicate that no discharges large enough to cause measurable water quality problems occur to the Bay from those activities. There appears to be no direct relationship between fish processing activities and bacteriological water quality; other sources, such as wet weather sewer overflows to the Bay, appear to be more directly associated with coliform levels.

Any increased level of fish processing activity that might be associated with improved harbor facilities due to the proposed project would be subject to similar fish handling and waste disposal regulations and practices as the existing activities in Sheds B and D. Consequently, similar to existing practices, any incremental increase in level of fish processing activity would not be expected to affect Bay water quality.

The proposed project would not result in any increased potential for fuel or oil spills from fishing vessels over that which currently exists. It is designed to provide improved facilities to accommodate the existing number of vessels using the harbor by providing dock space for boats now rafted or double-tied in the harbor, and the Port will continue its existing programs and practices to minimize fuel spills to the Bay and harbor. The project would include improvements at the existing fuel dock which would reduce the potential for fuel spills in the Harbor associated with the fuel dock.

The proposed project is not anticipated to generate a noticeable increase in the number of vessels using the harbor, and therefore, no increase would occur in potential for waste discharge from boats than currently exists. The new sewage handling facilities that would be included in the project would provide a convenience for the commercial fishermen and reduce the likelihood of illegal discharges to the Bay, which would indirectly protect water quality in the Bay.

Although the proposed project would not result in any increased potential for waste discharge from boats, there are additional procedures the Port could implement to minimize the likelihood of illegal discharge of wastes to harbor waters and to assure that waste disposal facilities are properly used. This would include increasing the coverage (24 hours/day and weekends) of wharfinger supervision and oversight of commercial boating and berthing activities at the proposed harbor. Water quality effects associated with discharge of stormwater to the Bay would not be expected to change substantially from the existing conditions.

Implementation of the proposed project would not be expected to affect the amount of litter or trash carried to the Bay. The Port could implement measures to improve the existing water quality conditions, such as increasing the frequency of the Port's work skiff operation and

coordinating with restaurant owners and nearby commercial operators to improve housekeeping practices.

Construction activities in the Bay, such as dredging, placement of fill and rock materials, removal of existing piles, and installation of concrete piles would result in temporary, localized increases in turbidity and suspended solids, and decreases in dissolved oxygen. These effects would be short term and would be minimized by compliance with conditions that address the preservation of water quality that the Port must follow in all dredging episodes and which are included in construction specifications. Construction work in the Bay is permitted by the Army Corps of Engineers and the Bay Conservation and Development Commission both of which establish these conditions. Similar to dredging activities, the Port would, as it is required to do by the California Department of Fish and Game, schedule in-Bay construction activities to avoid conflicts with the herring spawning season. In addition, as part of a good neighbor policy, the Port attempts to avoid conflicts with the scheduled activities of the swimming clubs.

Marine Biology (pp 124 - 125)

The reconstruction of the Hyde Street Pier would include removal of some existing rock and timber and placement of new rock and concrete fill. This would result in loss of habitat for some species and a gain in potential habitat for others. An estimated 0.16 acres of rock and timber would be removed, however, 0.43 acres of rock and concrete would be gained, resulting in a net increase of 0.27 acres of new substrate. Similarly, the 53 new concrete piles supporting the proposed floating dock would provide additional substrate for colonization by intertidal organisms. The losses of benthic habitat would be short-term due to proposed replacement of alternative substrate material. Removal of wooden pilings would remove some perching sites for the California brown pelican. This would not impact recognized roosting sites for the brown pelican or for the Double-crested cormorant.

Public Utilities (pp 126 to 127)

If the proposed project is implemented, an increase in impermeable surface areas, associated primarily with the floating berths and walkways, would occur. Stormwater runoff from these surfaces would drain directly to the Harbor. The estimated increase in impermeable surfaces associated with the floating berths and walkways would not affect the existing combined stormwater/sewer collection system.

Public Services (pp 128 to 129)

The incremental increase in demands for police services could be accommodated to some extent by the existing police force, although crime prevention measures would be required to minimize the additional demands for police services. Existing levels of staffing and equipment at the San Francisco Fire Department and the Port Fire Marshal would be expected to be adequate to accommodate any incremental increase in demands for their services.

Air Quality (pp 130 - 133)

It is unlikely that any increased level of fish processing activities associated with the proposed project would result in a noticeable increase in "fish" odors in the project area, particularly in Aquatic Park. In addition, the proposed project would not be expected to result in any increased odors associated with boating and vessel activity, such as diesel fumes, since the project would be designed to accommodate the existing level of boating activity and an increase in number of boats is not anticipated.

Transportation (pp 134 - 144)

The Hyde Street Harbor component of the project would have an increase of 45 spaces over the number of parking spaces that currently exist. The spaces would serve the existing users of the Harbor in that it is not anticipated that the improvements at the Harbor would result in an increase in the number of vehicle trips to the Harbor. Existing and future trips to the Harbor are already included as part of the existing traffic volumes and operating conditions in the study area.

The preferred component of the project for Pier 45 Sheds A and C, the Fisheries Center, would generate a total of 4,819 net new person-trips during the weekday AM peak hour, 438 person-trips during the weekday PM peak hour, and 615 person-trips during the weekend midday peak hour. With the proposed project, traffic operating conditions at the five study intersections would remain essentially unchanged. Under all conditions, all intersections would operate at Level of Service B or better except the intersection of Jefferson/Powell/The Embarcadero, which would operate at LOS C in the future with the proposed project and cumulative growth. If portions of Taylor Street and the Embarcadero were to operate as two-way streets near Pier 45, all intersections, including that at Jefferson/Powell/The Embarcadero, would operate at Los B. The proposed

project would not cause the Level of Service to degrade to an unacceptable Level of Service E or F during the weekday AM or PM peak hours, nor during the weekend midday peak hour.

The Harbor berthing addition is not expected to create any additional parking or loading requirements due to the fact that the additional berths would not bring in a noticeable number of new boats and forty-five parking spaces are being added in close proximity to the additional berths.

Transit demand generated by the proposed project is expected to be minimal. It would be distributed between four existing transit lines and two cable car lines that serve the project area. Most of the existing MUNI lines have excess capacities in the vicinity of the project. The F-Market line which is a new operative line could relieve the over-capacity condition that exists with the cable cars during the weekday PM peak and the weekend midday peak hour. Therefore it is not anticipated that this additional transit demand would result in impacts to transit.

A pedestrian crosswalk analysis was conducted for Existing Plus Project conditions at the intersection of Taylor and Jefferson Streets for the weekday and weekend midday peak hours. The addition of project-generated pedestrian trips to existing pedestrian volumes would not result in a noticeable change in the LOS from existing conditions.

Hazards (pp 145 - 163)

A 20,000-gallon and a 210,000-gallon above ground fuel tanks supply diesel to the fuel dock; the tanks are located at 440 Jefferson Street. There would be 300 feet of underground pipe from the tanks to the fueling station replaced and equipped with automatic shut off features, a leak detection system, a remote operated shut off switch, and pressure sensitive valves as part of the proposed project. The fuel dock would also be provided with spill containment equipment. Any hazardous materials identified in the buildings or piers would be properly removed and disposed

of by Port staff and/or subcontractors prior to pier removal or building renovation or demolition. The removal and disposal would be performed in accordance with applicable federal, state, and local hazardous materials regulations described in Appendix E. This would minimize the potential risk of exposure of workers and the public to hazardous building materials.

Installation of the proposed utilities would require excavation of more than 50 cubic yards of soil along the alley leading to the fuel dock and pump out facility. Hazardous wastes may potentially be present in the soil due to previous land uses along the proposed utility alignment. Based on the results of the site history, computerized record search, regulatory agency files, and a visual reconnaissance by a consultant there are numerous potential sources of hazardous materials and wastes within a one-half mile radius. The regulatory databases used to identify these sites are discussed in Appendix E. The Port would be required to sample and analyze any excess soil that could not be placed back in the excavation so that the soil could be classified for disposal purposes. Depending on the chemical quality it may be disposed of at a Class I, Class II, or Class III disposal facility within California. Soil with petroleum hydrocarbon levels greater than 100 milligrams per kilogram must be treated or disposed of at a Class I or II landfill.

It is estimated that approximately 20,000 cubic yards of sediment would be dredged to create the planned berths. Based on the sediment sampling and the bioassay results, it is expected that the sediments would be suitable for disposal at the Alcatraz disposal site. Minimal worker or public exposure to sediments would be expected during sediment dredging and disposal.

MITIGATION MEASURES (pp 165 to 172)

In the course of project planning and design, measures have been identified that would reduce or eliminate potential environmental impacts of the proposed project. Some of these measures have been, or would be, voluntarily adopted by the Port and thus are proposed; some are under consideration. Implementation of some measures may be the responsibility of other agencies. Measures under consideration may be required by the Port Commission, or the Planning Commission, as conditions of project approval, if the project were to be approved. Each mitigation measure and its status is discussed in the document. A newly appointed Fisherman's Wharf Environmental Quality Advisory Committee will provide input to the Port on measures that could further improve environmental conditions in the project area.

There are several measures required by law that would serve to mitigate potential impacts; they are included and summarized for informational purposes in the body of the EIR. Examples are those measures related to: water quality; observance of state and federal OSHA safety requirements related to handling and disposal of hazardous materials; dredging; police and fire protection; and utilities services.

No significant impacts are identified for any of the areas studied in this EIR: Land Use and Zoning, Water Quality, Marine Biology, Public Utilities, Transportation, or Hazards. These areas do not require mitigation to prevent significant impacts. However, several measures have been suggested to the Port during preparation of this EIR and several measures are included as part of the proposed project to further reduce potential impacts.

Water Quality

The measures that follow are proposed as part of the project. The Port has in place a "Best Management Plan" for dealing with the water quality issues related to maintenance dredging, oil spills, and cleanup of floatables in the Harbor. It now includes measures required by law and those that are described as part of the project. Measures required by law address oil spill response, dredging practices, disposal of spoils, and the handling of other wastes from boats. The Port would continue to: educate Port personnel and fishing boat owners about illegal discharges; use a work skiff daily to collect floating debris; and avoid dredging activities during herring spawning season.

Because of the proximity to Aquatic Park and the ongoing concern about water quality issues, the Port has agreed to expand its existing "Best Management Practices Plan" to include specific measures described in Section IV ENVIRONMENTAL IMPACTS for further protecting and enhancing water quality in the Harbor.

New measures proposed by the Port as part of the project would include: installation of new equipment to minimize the potential for fuel leaks from the storage tanks to the fuel dock; provision of an oil-water separator for the fuel dock area designed to collect runoff and direct stormwater to the separator prior to disposal in the Bay; installation of a new pump-out station at the fuel dock for disposal of chemical toilet wastes from the boats in the Harbor; enclosure of new berths on three sides by floats having protective pontoons and skirts to contain floatable

wastes within the Harbor; use of temporary wraps on any piles to be removed to reduce the release of particles to the Bay; and coordination of dredging activities so as not to conflict with scheduled swimming activities or herring season.

Public Services:

The proposed project would comply with all laws and ordinances related to egress, fire prevention and fire spread control.

Hazards

There were no significant impacts identified in relation to hazardous wastes. There are a number of mitigation measures required by law to address the potential presence of hazardous wastes within the project area. See V. MITIGATION MEASURES, pages 168 to 170. The measures include a survey of buildings in the project area to identify potential hazardous building materials which would be abated in accordance with the requirements of the Bay Area Air Quality Management District, the California Occupational Safety and Health Administration and federal, state and local laws. The Port will insure compliance with the San Francisco Public Works Code, Section 1000, Article 20, "Analyzing the Soil for Hazardous Wastes" if more than fifty cubic yards of soil is excavated and a site mitigation plan would be prepared if results of testing indicate the necessity for it.

Cultural Resources

The Initial Study provided that the program of archaeological monitoring described in the 1989 report would mitigate potentially significant impacts of the project and it is therefore included in this EIR, as follows: given the strong possibility of encountering the remains of cultural or historic artifacts or features within the project site, the Port would retain the services of an archaeologist(s) with expertise in both prehistoric and ethnographic materials and maritime history to supervise a program of on-site monitoring during site excavation. See page 171 in the EIR for the complete measure.

ALTERNATIVES TO THE PROPOSED PROJECT (pp 175-184)

As part of the environmental review process for the Hyde Street Fishing Harbor/Pier 45 Sheds A and C project, the City has analyzed three alternatives. Neither the preferred project nor any of

the alternatives studied would result in significant environmental impacts. However, the proposed project is the environmentally superior project because it is a reduced scale of harbor development and would result in less Bay cover and Bay fill. The Port, as the project sponsor, has not rejected any of the three alternatives. The maximum harbor expansion alternative proposed by the Port in 1988 is no longer believed to be necessary at this time or economically feasible, given the decreasing volume of the commercial fishing haul and the fewer number of vessels in the Bay Area. However, this alternative is retained for informational purposes and for future possible consideration by the Port.

One alternative design for the Harbor and Harbor Services Area is considered, and two alternative uses for Pier 45 Sheds A and C are considered. Because most physical changes for each of the alternatives are the same as for the proposed project, the analysis focuses on features or uses that would have differences. For the Harbor Berths and Service Area Alternative, the analysis focuses on potential effects to water quality and marine biology from an expanded dock area (86 floating berths compared with 40 floating berths for the proposed project). The quantities of bay fill for the two Harbor alternatives differ. For the two Pier 45 Sheds A and C Alternatives, the analysis focuses on identifying differences in traffic and parking impacts.

In addition to reasonable alternatives to the project, CEQA requires that the EIR evaluate the "No Project" Alternative. The No Project Alternative analysis must discuss existing conditions as well as reasonably foreseeable future conditions, without the project based on current plans and available infrastructure.

No Project Alternative

The No Project Alternative would consist of leaving the conditions in the Main Harbor, which is bordered by the Hyde Street Pier on the west, the breakwater on the north, and Pier 45 on the east, as they exist now. The key features of the No Project Alternative (existing conditions) are: retention of the 116 assigned boat slips; within the Inner and Outer Lagoons of the Harbor, boats would continue to side-tie and double-stack, and facilities for these activities would not be upgraded; no pump-out or restrooms would be available to fishing vessels or operators. On Pier 45 Sheds A and C: existing storage would be retained; parking in the sheds, valley, and on "forepier" would remain; special events in the Sheds would occur periodically; space for

temporary special art and cultural exhibits, and other short term community events would continue; a staging area for visiting ships and the Pampanito would remain; 1000 sq. ft. office space in Shed A would remain; and informal, unimproved public access along the outside aprons of Pier 45 would continue. Also, on Pier 45 Sheds B and D, it is anticipated that the fish handling would fully occupy the 140,000 sq. ft.

Information describing the existing conditions of the project area is in Section III. SETTING (pp 33 to 108) . The existing conditions of inadequate berth space for commercial fishing boats in the harbor, limited parking for the fishing boat crews, poor sanitary facilities, and outdated fueling equipment with a greater possibility of spills, would remain. The existing working wharf, which includes Piers 45, 47, Fish Alley (Seawall lots 302 and 303) and the adjacent water and berthing space, is a fish distribution center for the San Francisco Bay Area and source of seafood for Wharf area restaurants. There are minimal harbor service facilities to support the commercial fishing industry. Under the No Project Alternative this would not change. The existing mix of tourist serving uses, limited public access and support space for ferries and other vessels would not change, except as there could be some incremental minor changes over time.

Alternative A - Hyde Street Fishing Harbor Maximum Expansion

The maximum expansion Alternative A for the Harbor and Harbor Services was developed from the results of the 1988 Feasibility Study. Survey information in 1988 defined future needs of the commercial fishing industry and indicated a need for an expanded facility for fishing boats and the need for a new Harbormaster's Building in the harbor area. Survey information collected in 1994-1995 indicated that the increased need no longer exists; therefore this project alternative is not now considered reasonable by the Port staff. However, this Alternative A has been retained in this EIR for comparison purposes with the Proposed Project. In the event that the needs of the commercial fishing industry return to 1988 conditions in the relatively near future (5-10 years) this analysis could aid in the consideration of future expansion of harbor facilities.

The Hyde Street Fishing Harbor maximum expansion Alternative A would have these features: off the Hyde Street Pier, construct new berths for 116 boats, which would have 86 floating berths, 10 side tie spaces and 10 stern tie spaces; retain the existing 99 assignable boat berths + 17 dock-tie boat spaces in the Fisherman's Wharf Inner and Outer Lagoons; provide a new 4,100-sq. ft. Harbormaster's Building on the reconstructed area of the Hyde Street Pier (this

alternative would involve 32,150 sq. ft. of Bay cover and 126 concrete piles); add 24 more parking spaces approximately 200 feet south of the Pier and 28 parking spaces on the Pier; a new fuel station and harbormaster's building; and a vessel sewage pump-out station.

There were no substantial differences in traffic or parking effects for this alternative compared to the proposed project because some boats originate from other Bay Area locations and there is not a one-to-one ratio between fishing boats and vehicles in the project area. Additionally, vehicle traffic associated with commercial fishing does not occur during peak traffic commute periods.

Water quality conditions would be expected to remain similar to existing conditions, which is generally within the same range as water quality from nearby parts of San Francisco Bay and in compliance with Basin Plan water quality objectives, because no direct relationship has been found between the presence of fishing boats and water quality effects. There would be short-term water quality effects such as increased turbidity and suspended solids during construction, as with the proposed project, but following construction, conditions would be expected to be in compliance with Basin Plan water quality objectives similar to existing conditions, the No Project alternative, and the Proposed Project. The maximum build-out alternative (Alternative A) would increase Bay cover from floating berths by 14,450 sq. ft. compared with the proposed project. The total increase in fill/cover over the proposed project would be 31,505 sq. ft. of cover and 647 cy of fill in the Bay, and 3,315 sq. ft. of cover and 460 cy of fill in the Shoreline Band. Within the Shoreline Band BCDC's primary criteria for evaluation is maximum public access; Alternative A would provide the same public access as the proposed project. Alternative A does not include additions to or changes in the uses of the Sheds on Pier 45.

Alternative B - Pier 45 Sheds a and C - Conference Center Focus

The differences between the Pier 45 Alternatives B and C and the Proposed Project are interior building design and uses of the Pier Sheds A and C. The exterior of the Sheds would not change, and the proposed Hyde Street Harbor expansion and improvements would be as described for the Proposed Project. The conceptual design for a Conference Center focus in the sheds is shown on Figure 20, page 180. It is summarized as follows: PIER 45 Sheds A and C would have 205,000 square feet of new uses: a Conference Center containing 60,000 sq. ft. of

multi-functional conference facility and event space; 50,000 sq. ft. of parking; 40,000 sq. ft. of retail; 10,000 sq. ft. of office space; and 45,000 sq. ft. of outdoor public access.

The travel demand of the Conference Center Alternative B, which does not include the visitor center use that is part of the proposed project, but has a greater square footage of conference facility, would be expected to generate a higher number of vehicle-trips than the Proposed Project.

Traffic operating conditions were analyzed for the intersections closest to the Pier. Under the Conference Center alternative, all intersections would operate at LOS B or better. The Conference Center alternative would, in general, result in larger number of transit riders than the Proposed Project during the weekend midday peak hour about 50 trips. These trips would be distributed between the existing transit lines, the cable cars, and the new F-Market line. It is anticipated that these trips would be accommodated within the existing and planned transit lines which currently operate with available capacity for additional passengers.

Under the Conference Center alternative, the LOS for conditions for the crosswalks at Jefferson and Taylor Streets would be the same as identified for the Proposed Project. All crosswalks would operate at LOS D or better, except for the east crosswalk which would continue to operate at LOS E.

Parking/Loading Conditions: The Conference Center alternative would result in a parking demand of 118 spaces (compared with the proposed parking supply of 200 spaces). Under this alternative the Planning Code requirement would be 260 spaces, and therefore there would be a shortfall of 60 Code-required spaces. As part of the conditional use request to be reviewed by the Planning Commission, a reduction in Code required spaces could be granted. Loading activity associated with this alternative would result in a daily demand of 15 delivery/service trips per day, and a demand for one loading space during the peak and average hours; two are proposed, and thus the demand would be met. All other potential effects would be the same as described for the proposed project because Alternative A would have the same harbor features as the proposed project.

Alternative C - Pier 45 Sheds a and C - Educational Center Focus

Similar to the Proposed Project use of Sheds A and C, and to Alternative B above, the Pier 45 Educational Center Focus Alternative would involve physical changes to the interior design and

use of the Sheds. The facilities for the Pier 45 Education Center Focus are shown in Figure 21 (page 184). Alternative C for Pier 45 Sheds A and C would create 235,000 square feet of new uses. The Education Center would occupy 125,000 square feet and function as a multipurpose facility to serve both the seafood industry and visitors; it would be designed for public viewing and hands-on education to include bilingual fish processing training, seafood inspection, retail marketing, "In-class workshops", seafood cooking and demonstrations. There would be no conference center space; parking would occupy 50,000 square feet; other retail - 15,000 square feet; no office space; and Outdoor Public Access of 45,000 square feet would be the same as the preferred alternative.

Travel demand for the Educational Center alternative, which includes predominantly education/visitor uses, would generate about 108 more vehicle-trips than the Preferred Alternative during the weekday PM and an increase of 91 vehicles during the weekend midday peak hours. The alternative would contribute less than 10% to the intersections of Taylor/Jefferson and Jefferson/Powell/The Embarcadero during the weekend midday peak hour, and approximately 15% during the weekday PM peak hour. Despite the estimated increase in vehicle trips, the nearby intersections would operate at LOS conditions similar to the proposed project with the Educational Center alternative. All intersections would operate at LOS B or better. (See Table 18, page 189).

Transit/Pedestrian Conditions for the the Educational Center alternative would result in larger number of transit riders than the Proposed Project. As with the Proposed Project, the trips would be distributed among the existing and proposed new transit lines serving the Fisherman's Wharf area, which currently have available capacity. The weekend pedestrian conditions at the intersection of Jefferson and Taylor would be similar to the existing conditions as well as those identified for the Proposed Project. All crosswalks would operate at LOS D or better, except for the east crosswalk which would continue to operate at LOS E. The Educational Center alternative would result in a parking deficit of about 57 spaces. However, the Planning Code requirement of 93 spaces would be met by the 200 proposed spaces in Sheds A and C. The Educational Center Alternative would generate a daily demand of 15 delivery/service trips per

I. SUMMARY

day, and a demand for one loading space during the peak and average hours; two loading docks are proposed.

All other potential effects would be the same as those described for the Proposed Project.

II. PROJECT DESCRIPTION

A. OBJECTIVES OF THE PROJECT SPONSOR

The Port of San Francisco (Port) is proposing to construct the Hyde Street Fishing Harbor, a new 60 space floating dock harbor to add to the existing 116 berth (99 berths and 17 side-tie spaces) commercial fishing harbor at Fisherman's Wharf, and to develop uses complementary to the fishing industry on Pier 45 in approximately 140,000 to 190,000 square feet of Sheds A and C. These proposed projects relate to earlier improvements made in the Fisherman's Wharf area to serve the commercial fishing industry. The earlier projects include: a breakwater built by the U.S. Army Corps. of Engineers in 1986; approximately \$11.6 million in earthquake repairs at Pier 45 completed in August of 1995; a centrally located harbormaster's office at the existing harbor completed in May of 1995; and extension of fuel dock hours and lowering of prices for fishermen accomplished in 1995.¹

The Port's objective is to construct a harbor that can accommodate the unmet demand for berthing of the existing commercial fishing industry, thereby improving the convenience, safety and efficiency of harbor operations. The existing 116 berths and side-tie spaces leased by the Port in the lagoons at Fisherman's Wharf are 100 percent occupied, and there is some demand for transient berthing and longer boats (40-50 foot) which is currently unmet. For example, it is common to have forty or more boats rafted (tied to a pier and tied to other boats) in the harbor and 12 to 14 boats side-tied to Pier 45 because of the limited number of berths in Fisherman's Wharf.² Many longer boats overhang the existing berths. Commercial fishing boats are the harbor's priority user and the Port gives them preferential berth assignments.³ In the last three

¹ Dan Hodapp, Port of San Francisco, memo dated May 23, 1995.

² Conversation with John Davey, Port Wharfinger, April, 1995.

³ According to San Francisco Port Commission Terminal Tariff, FMC No. 4, Rules and Regulations (March 1, 1994), "Every boat entering the jurisdiction of the San Francisco Port Commission shall immediately become subject to the authority and direction of the Chief Wharfinger. Each boat shall be berthed in the space assigned by the Chief Wharfinger" (Item No. 820). . . . Preferential Assignment is the priority right granted a person to use a certain stall space at Fisherman's Lagoon, including such improvements and areas as are designated in the assignment. Commercial Fishing Vessels, Historical Commercial Fishing Vessels and Fishing Party Boats shall be given priority over Pleasure Boats for these stalls" (Item No. 831).

II. PROJECT DESCRIPTION
A. Objectives of the Project Sponsor

years (1992/93, 1993/94 and 1994/95) approximately 170 commercial fishing vessels were in the lagoons and harbor on a daily basis during the herring season.⁴

Although fish landings data show that the volume of landings in the Bay Area has declined by about 40% since 1988, and about 52% in San Francisco,⁵ the Port believes that the existing facilities at Fisherman's Wharf and Pier 45 are insufficient to meet both existing and future commercial fishing industry needs. However, due to the seasonal nature of the commercial fishing industry, there may be times when the Fishing Harbor is not fully leased and recreation boats will be provided an opportunity to temporarily use spaces.⁶ This is most likely to occur from August to December when transient fishing boats are fewer.

The existing harbor does not have a pump-out facility for boats to remove sanitary waste from their on-board storage tanks, nor does the existing harbor have restrooms for boat operators. The proposed project would include a pump-out and restroom adjacent to the existing fuel dock on the east side of the Hyde Street Pier. Parking for boat operators would also be provided at the foot of the Hyde Street Pier and at the backside of the building at 490 Jefferson. Parking stickers would be issued to fishing boat operators for use of parking.

The Port is also proposing to place new uses complimentary to the fishing industry in the existing Sheds A and C on the east side of Pier 45 as part of the project. Together these two sheds contain approximately 140,000 square feet of ground space and are adjacent to Sheds B and D, which are leased for fish processing and fish handling. From 1993 to 1995 the Port made seismic and building code improvements to Pier 45. Since completion of the repairs in August of 1995 the Port has leased about 80 percent (as of November 1995) of the space in Sheds B and D along the west side of the Pier for fish processing. (Sheds B and D are not part of the proposed project. Information on uses of these sheds is provided as background for water quality).

The Port's overall objectives for Pier 45 are: 1) to accommodate the fish handling industry in modern, sanitary facilities; and 2) to provide for public and visitor uses complementary to the fishing industry and to the Fisherman's Wharf area.

⁴ Conversation with John Davey, Port Wharfinger, April, 1995.

⁵ Department of Fish and Game Statistics for Selected Species, San Francisco Bay Area Commercial Fish Landings 1988-1993; the San Francisco Bay Area includes: San Francisco, Bodega Bay, Princeton, Oakland, and Sausalito. Data for Fisherman's Wharf/Pier 45 show a decrease of 61% fish landings between 1988 and 1993.

⁶ Dan Hodapp, Port of San Francisco, memo dated May 23, 1995.

A feasibility study on specific uses of Sheds A and C that would complement the development of the harbor area at Fisherman's Wharf was completed for the Port in 1994 using grant funding from the National Oceanic and Atmospheric Administration (NOAA).⁷ Building on a 1988 feasibility study for Pier 45 by the California State Coastal Conservancy,⁸ the 1994 *Concept Development, Market and Financial Feasibility Analysis for the Fisheries and Environmental Research Center*, concluded that uses of Sheds A and C on Pier 45 need to satisfy the following objectives:

- meet the needs of the commercial and recreational fishing industries
- provide public access to the waterfront
- complement the existing activities and uses within the Fisherman's Wharf area
- preserve or enhance revenues accruing to the Port

The 1994 study included extensive dialog with representatives from the fishing and seafood industries and Fisherman's Wharf retail area. It was recognized early in the study that industry-serving uses would not be financially self-supporting and that complementary uses would be necessary to generate revenue to support the overall development of the Pier.

On the basis of the findings outlined above, the proposed project would improve Sheds A and C for a combination of commercial fishing industry and visitor/public uses. Existing parking on the forepier between the sheds and the Embarcadero (68 spaces) would be retained. The proposed Pier 45 project would include 200 parking spaces for Sheds A and C.⁹ The Port is considering three primary alternative uses for Sheds A and C: an Educational Center; a Conference Center; and a Fisheries Center. All uses would include outdoor public access, parking for fish processors and shed users. The Port has convened a group of community representatives including representatives from the commercial fishing industry to advise the Port on the long term uses of Sheds A and C. The group is referred to as the Pier 45 Advisory Group. The proposed alternatives are described in Section C of the Project Description, and in Section VII, ALTERNATIVES TO THE PROPOSED PROJECT.

⁷ Concept Development, Market and Financial Feasibility Analysis for the Fisheries and Environmental Research Center, By Sedway & Associates, with Coastal Resources Center and Kwan Henmi Architectural Planning, November, 1994.

⁸ Coastal Conservancy Study AB 45: Preliminary Feasibility - Commercial Fishing & Marine Environmental Research and Training Center, Pier 45 and Satellite Locations, December 1988.

⁹ Parking on Pier 45 prior to the earthquake retrofit included 50 spaces in Shed A and C and 120 spaces in the valley between the Sheds.

B. PROJECT LOCATION

The proposed project is in the Fisherman's Wharf area of San Francisco's northern waterfront (see Figure 1, page 5). The project site is on Port property and is under the jurisdiction of the Port Commission of the City and County of San Francisco. The project site is also within the Coastal Zone and Special Area Plan for the San Francisco Waterfront under the jurisdiction of the Bay Conservation and Development Commission (BCDC).

The project site is bounded by a breakwater and the San Francisco Bay to the north, the San Francisco Maritime Park/Hyde Street Pier to the west, Jefferson Street to the south, and Taylor Street and Pier 45 to the east (see Figure 2, page 6). It is in a C-2 (Community Business) use district, and a 40-X height and bulk district, and in the Northern Waterfront Special Use District No. 1, in which non-maritime uses require Conditional Use authorization from the City Planning Commission, and maritime-related uses are principal permitted uses requiring no special Planning Commission review. The site is within the Fisherman's Wharf Sub-area of the City of San Francisco's Master Plan and the Port's Waterfront Land Use Plan.

EXISTING USES ON OR ADJACENT TO THE PROJECT SITE

Most of the Fisherman's Wharf area was originally a shallow cove of San Francisco Bay. The cove was incrementally filled in until completion of the Great Seawall in 1890. The first commercial activities in the area were by immigrant fishermen who made fishing an important industry in the City. The Wharf became the region's fishing industry center in the early 1900's. It is the fishing industry that gave Fisherman's Wharf its character and it remains a major attraction for the area's visitors and local residents. The area restaurants originated as extensions of the fishing industry, and many remain at the wharf's edge, overlooking the active and historic fishing fleet.

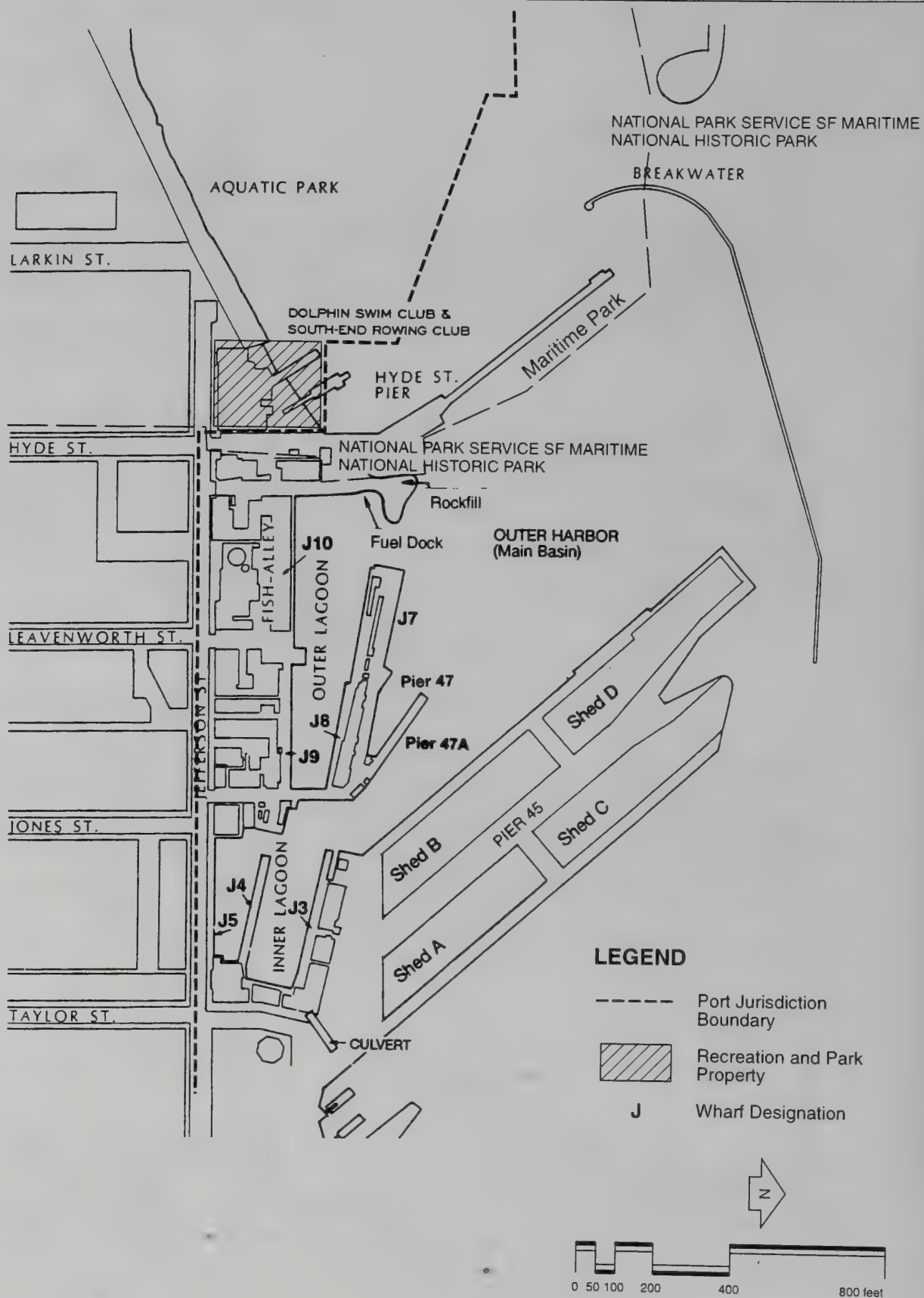


LOCATION MAP

FIGURE NO. 1

SOURCE: PORT OF SAN FRANCISCO/THE DUFFEY COMPANY





EXISTING SITE PLAN

FIGURE NO. 2

A major portion of the Hyde Street Pier is leased by the Port to the National Park Service (NPS) for the San Francisco Maritime National Historic Park. Five historic ships that belong to the Park Service are moored off both sides of the Hyde Street Pier. The east side of the Hyde Street Pier includes about 0.16 acre of rockfill and about 150 wooden piers supporting a 420 square foot fuel station and paved parking area for five vehicles. There are currently two fuel dispensers (no pump-out, no restrooms, no convenience store).

To the west of Hyde Street Pier is Aquatic Park, a public recreational swimming and rowing area of the Bay managed by and under jurisdiction of the National Park Service - Goldengate National Recreation Area. Aquatic Park has occupied this location since 1938. At the foot or landward end of the Hyde Street Pier and to the west of the Pier (502 Jefferson Street) are the private clubhouses used by the Dolphin Swimming and Boating Club and the South End Rowing Club. These clubs have existed since the late 1800's and their clubhouses have been located along the waters' edge at other locations until they were moved to the current location in 1938. The clubhouses are on public park property under the jurisdiction of the San Francisco Recreation and Park Department, leased to the clubs for recreational use.

While there are strictly only 116 existing berths and side-tie lease spaces located in both the Inner and Outer Lagoons, rafting of boats allows about 170 fishing boats in the Fisherman's Wharf Harbor. All berths and spaces are leased and used year-round. Additional fishing vessels regularly use the harbor, and raft up to Pier 45, Wharf J7 nearby, or moor in the harbor wherever space is available (see Figure 3). Throughout the year there are also varying numbers of transient vessels using the harbor for brief periods (a portion of one day to several weeks). The herring season, which runs from November through March, is the busiest time of year for both fishermen and fish handlers at Fisherman's Wharf.

Prior to the Loma Prieta Earthquake of 1989, the primary use of Pier 45 was to provide space for fish handlers and parking for fishermen. Four sheds, which total approximately 270,000 square feet, are on the Pier. Sheds B and D (which are not part of the proposed project), totaling about 130,000 square feet on the west side of the Pier, have been traditionally used for fish handling, circulation, and storage of fishing/boat gear. As a result of the 1989 earthquake damage, most tenants from Sheds B and D temporarily relocated to Fish Alley and to Piers 28, 33 and 54.

Figure 3 Rafting of Boats in Harbor



SOURCE: THE DUFFEY COMPANY .

II. PROJECT DESCRIPTION

B. Project Location

The space allocation created after the earthquake repairs does not represent a substantial increase in any use from that which existed before the earthquake. There is no change in the exterior envelope or appearance of the sheds. The space in Sheds B and D devoted to various uses after the earthquake repairs is 113,900 square feet for fish handling and circulation, and 18,720 square feet for storage, restrooms and utilities.¹⁰

Prior to the earthquake Sheds A and C, totaling about 140,000 square feet of floor space on the east side of the Pier, were partially vacant and contained a variety of facilities: support space for the Red and White ferry boat fleet and the submarine Pampanito, which is moored along the eastern edge of the Pier; office space for area merchants; parking for 50 vehicles; and a space where special public events, such as Festa Italiana, were held. The space between the sheds, the "valley," was used for truck access and parking for tenants of about 120 vehicles. Since the earthquake the "valley" has also been used for tour bus parking (up to 20 buses) and for movie production equipment. Existing parking on the forepier, or landward side of the sheds (about 68 spaces), is also used by tenants in the area. Public access is along the aprons on the east and west of the sheds on Pier 45.

The Port has completed the repairs of the earthquake damaged portions of Pier 45 at a cost of approximately \$11.6 million, largely funded with a grant from the Federal Emergency Management Agency (FEMA) and other state and federal sources.¹¹ Construction started in 1991 to demolish interior partitions and structures, repair and replace damaged utilities and floor slabs, repair the seawall, replace supporting piles and stabilize soils and fill areas under the Pier, add restrooms, add floor drains, floor sinks, and solids separators, and add a stormwater oil and water separator in the valley area between the sheds for storm water runoff.¹² Seismic repair of Pier 45, was completed by August, 1995. The fish processing and fish handling uses have returned to Sheds B and D with about 80 percent of the sheds leased as of November 1995.¹³

At the turn of the last century, San Francisco handled more fresh fish than all other West Coast ports combined. Today, it has the largest concentration of fish distributors and brokers on the

¹⁰ Department of City Planning, Planning Department File 88643E, note to file, October 26, 1990.

¹¹ The Department of City Planning, Office of Environmental Review, issued an emergency Statutory Exemption (CEQA Guidelines Section 15260-15277) in November of 1989 for the repairs of earthquake damage at Pier 45.

¹² FEMA Project, Pier 45, Plans, December 1993.

¹³ Dan Hodapp, Port of San Francisco, memo dated November 6, 1995.

II. PROJECT DESCRIPTION

B. Project Location

west coast and remains the region's handling and distribution center. As shown in Table 1 San Francisco Bay Area fish landings have declined between 1988 and 1995 from 21.8 million pounds to about 11.0 million pounds. Table 2 shows that about 3.1 million pounds of fish were landed in 1993 (brought to the Harbor and off-loaded to the Pier by boats) at Fisherman's Wharf/Pier 45, with more brought in overland from other ports to process and trade.¹⁴ This is a decline of about 60% compared to 1988.

For at least a decade, during the early morning hours (approximately 3:30 AM to 7 AM), Jefferson Street in front of Pier 45 has been the site of fish distribution and trading from trucks. An average of ten to twelve trucks were observed along Jefferson Street during the early morning trading activities in January of 1995 (see Figure 4). The Port proposes to move this activity to the central "valley" on Pier 45 where truck movement and parking would have less impact on street circulation. Use of the parking triangle adjacent to Pier 45 will also be encouraged for this early morning truck activity.

Fish Alley and Wharf J7 are located north of Jefferson Street on the waterside and between Pier 45 and the Hyde Street Pier. Fish Alley extends along Seawall Lots 302 and 303 between Jones and Hyde Streets and contains fish landing and handling facilities, storage areas for various types of gear, and fuel tanks that serve the fuel dock. (see map on page 6). Two existing fuel tanks were removed in January 1995 and replaced with two new 20,000-gallon tanks at 460 Jefferson Street. There are also retail and art gallery uses, limited parking, and restaurants along Jefferson Street.

¹⁴ California Department of Fish and Game, *Statistics for Selected Species*, 1995.

Table 1:

Commercial Fish Landing Volumes and Values, San Francisco Bay Area

Dept. of Fish & Game Statistics for Select Species

Species	1988		1989		1990		1991		1992		1993		1994		1995	
	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value
Anchovy, Northern	1,082,430	\$121,587	1,631,260	\$160,288	1,410,970	\$141,735	1,012,330	\$108,090	362,430	\$34,408	537,738	\$108,972	277,966	\$68,121	1,948	\$779
Halibut, California	112,845	\$257,575	143,778	\$324,461	148,882	\$364,692	193,584	\$461,958	217,744	\$520,789	215,466	\$524,705	177,719	\$444,420	225,839	\$576,911
Herring, Pacific	12,322,200	\$3,203,750	12,838,200	\$2,860,990	14,164,300	\$5,970,420	12,712,800	\$8,904,990	10,535,500	\$7,436,200	5,653,710	\$1,412,620	3,215,630	\$1,620,700	5,476,840	\$5,247,730
Herring, Roe on Kelp	-	-	87,584	\$175,167	185,750	\$1,525,370	115,399	\$988,623	83,698	\$437,681	-	-	55,004	\$109,376	31,300	\$63,188
Lingcod	261,635	\$99,828	272,941	\$112,004	370,384	\$139,180	373,039	\$140,373	172,167	\$68,046	186,984	\$81,703	167,680	\$71,523	167,594	\$84,516
Rockfish, Bocaccio	425,466	\$166,872	329,177	\$114,674	837,369	\$260,555	500,301	\$161,642	345,582	\$116,437	205,006	\$67,254	126,544	\$49,118	158,702	\$64,378
Rockfish, Chilipepper	-	-	-	-	-	-	1,148,150	\$373,507	1,313,940	\$434,725	572,088	\$186,501	453,269	\$180,132	563,041	\$222,726
Rockfish, Unspecified	1,133,410	\$376,881	905,786	\$299,288	2,054,740	\$679,591	915,965	\$356,129	576,412	\$244,743	324,147	\$183,952	181,405	\$67,082	273,904	\$123,720
Rockfish, Widow	261,551	\$87,568	137,048	\$38,561	703,939	\$212,785	571,013	\$174,558	457,824	\$145,207	104,809	\$30,838	75,532	\$27,183	507,438	\$200,756
Sablefish	1,256,620	\$561,942	1,274,680	\$500,096	684,669	\$282,641	527,130	\$280,864	440,585	\$205,702	412,819	\$166,783	328,055	\$249,304	409,130	\$461,974
Salmon, Chinook	617,190	\$1,812,880	224,845	\$600,651	247,576	\$744,856	197,050	\$552,336	134,604	\$401,187	75,931	\$183,805	129,205	\$287,187	443,330	\$834,988
Sanddab	155,667	\$53,734	118,681	\$37,433	67,349	\$20,490	104,669	\$33,107	103,748	\$33,605	73,724	\$44,278	95,816	\$32,895	155,438	\$53,786
Sole, Dover	1,237,580	\$385,864	1,388,700	\$382,242	372,105	\$96,231	861,093	\$253,750	1,101,500	\$321,387	610,354	\$162,859	261,427	\$63,006	592,741	\$160,448
Sole, English	304,808	\$126,023	254,202	\$104,767	204,991	\$71,445	215,624	\$80,498	187,271	\$69,837	171,146	\$63,762	157,909	\$61,020	229,706	\$89,908
Sole, Petrale	292,471	\$204,120	198,216	\$149,278	147,632	\$115,633	187,477	\$149,261	165,349	\$124,626	157,330	\$119,104	139,874	\$115,364	156,776	\$141,584
Swordfish	1,941	\$10,253	155,777	\$540,048	71,376	\$256,043	94,299	\$392,853	17,983	\$62,373	48,038	\$162,195	41,433	\$150,460	72,738	\$269,382
Thornyhead	214,935	\$76,033	435,172	\$161,966	222,632	\$85,181	274,806	\$119,071	416,529	\$186,389	378,457	\$171,402	185,433	\$114,062	158,103	\$158,762
Crab, Dungeness	527,782	\$819,407	161,330	\$279,145	250,826	\$530,733	178,818	\$369,638	98,200	\$171,566	94,827	\$148,900	609,107	\$928,880	655,730	\$1,125,430
S F TOTAL	21,843,900	\$9,251,350	21,605,400	\$7,517,440	23,255,700	\$12,111,200	21,284,400	\$12,479,500	17,789,200	\$11,498,300	10,501,700	\$4,245,700	7,421,550	\$5,140,300	11,009,400	\$10,423,200

II. PROJECT DESCRIPTION

B. Project Location

II. PROJECT DESCRIPTION

B. Project Location

TABLE 2: Fish Landing Volumes at Fisherman's Wharf/Pier 45 and Selected Northern California Ports, 1988 and 1993

<u>PORT</u>	<u>FISH LANDINGS (Pounds)</u>		
	<u>1988</u>	<u>1993</u>	<u>Change</u>
San Francisco*	21,843,900	10,501,700**	-51.9%
Fisherman's Wharf/Pier 45***	7,927,565	3,088,738	-61.0%
Bodega Bay	14,911,600	7,974,380	-46.5%
Princeton	5,686,840	6,534,240	+14.9%

* includes: Fisherman's Wharf

** 1994 San Francisco landings total 7,421,550

*** Landings Receivers: No End Fish Co., Larocca Seafood, Morgan Fish Co., Golden Seas Fisheries, Meatball Bait Distributor, ICM.

Source: EJM & Associates, from California Department of Fish & Game, June 24, 1995.

Figure 4 Jefferson St. Truck Trading Activity



SOURCE: THE DUFFEY COMPANY

Fisherman's Wharf Hyde Street Harbor & Pier 45, Sheds A and C

C. PROPOSED PROJECT

The proposed project has three major components (see Figure 5):

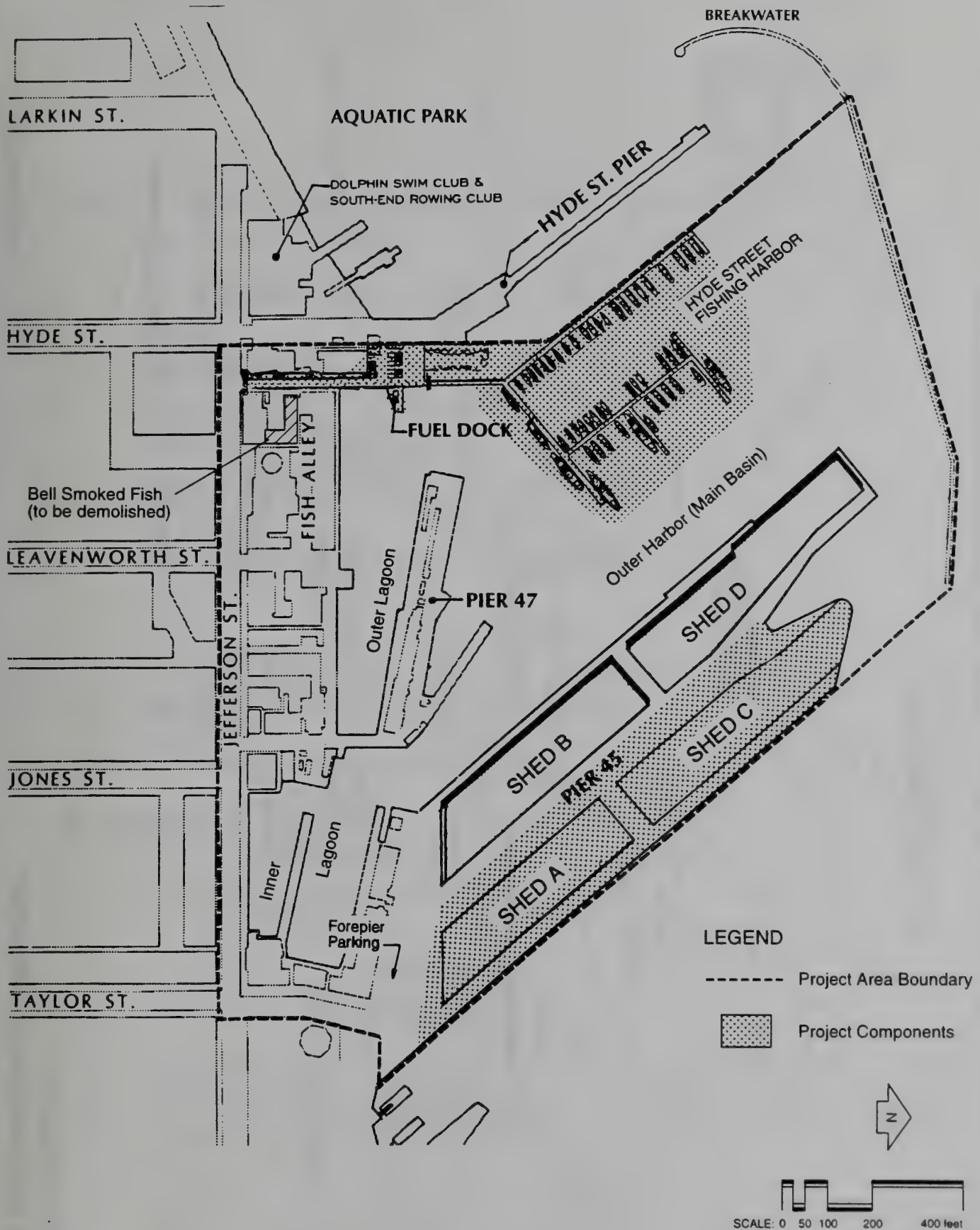
- 1) Hyde Street Fishing Harbor;
- 2) Harbor Service Facilities; and
- 3) Pier 45 / New Uses in Sheds A and C.

HYDE STREET FISHING HARBOR

The Hyde Street Fishing Harbor component of the proposed project would include reconstruction of the east side of Hyde Street Pier and construction of a new Hyde Street Fishing Harbor with space for 60 boats (see Figure 6). The proposed 60 berth harbor would increase the boat lease space in the harbor area to a total of 176 boats (116 spaces exist in the inner and outer harbor). Some fill, as well as dredging and pile driving, would be necessary to create the floating berths and supporting facilities. Permits and approvals required for dredging, pile driving and placement of fill are outlined below.

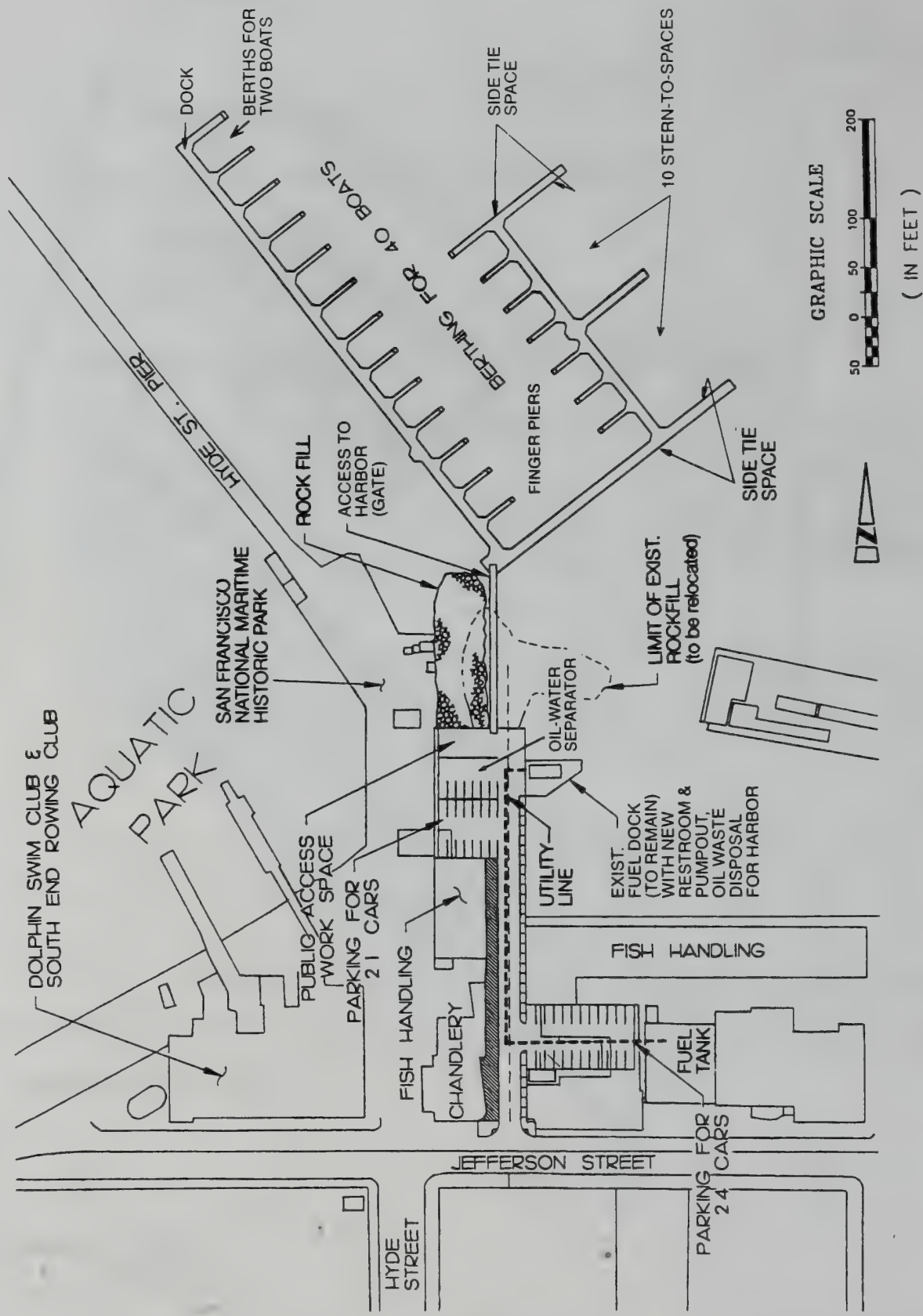
Reconstruction of the east side of Hyde Street Pier would include the removal and relocation of the existing rock fill and replacement of the existing timber pier structure with concrete piles. Approximately 22,723 square feet of fill/cover in the Bay and about 9,475 square feet of fill on the shoreline would result from reconstruction of the Pier and new berths, (as shown in Table 3, below).

The Hyde Street Fishing Harbor berthing system would be constructed to the west of Pier 45, to the east of the Hyde Street Pier and San Francisco Maritime National Historic Park (National Maritime Park). The new berthing system would consist of 40 permanent floating berths with separating floats (about 17,700 square feet of floating dock) supported by a concrete guide pile berthing system, with 53 new 24-inch square concrete piles. The dock would be designed to accommodate ten oversized vessels tied at their stern to the dock, (without separating floats) and approximately ten oversized vessels side-tied to the dock (see Figure 6). First priority for leases would be given to commercial fishing vessels in accordance with Port of San Francisco Tariff No. 3-C, Section 8-Fishing Industry.



PROJECT COMPONENTS

FIGURE NO. 5



**PROPOSED PROJECT
HARBOR BOAT MARINA COMPONENT**

FIGURE NO. 6

SOURCE: PORT OF SAN FRANCISCO/THE DUFFEY COMPANY

TABLE 3: BAY AND SHORELINE BAND FILL BY BCDC CRITERIA

<u>Description</u>	<u>60 Boat Proposed Project</u>
Berthing	
Floats (SF) of coverage	17,700
Piles Supporting Floating Dock (CY)	270
Pier (in the Bay)	
Pile-Supported Fill (SF)	4,875
Pile-Supported Fill Removed (SF)	(1,420)
New Pier (in the Shoreline Band)	
Coverage, Solid Fill (SF)	7,150
(CY)	715
Pile-Supported Fill (SF)	2,325
Pile-Supported Fill Removed (SF)	(760)
TOTALS*	
Coverage/Fill of the Bay (SF)	22,723
Supported by Piles (CY)	270
Coverage/Fill in the Shoreline Band (SF)	9,475
Solid Fill (CY)	715

* Does not include Fill removed of 2,180 SF

SF Square Foot of fill
CY Cubic Yards of fill

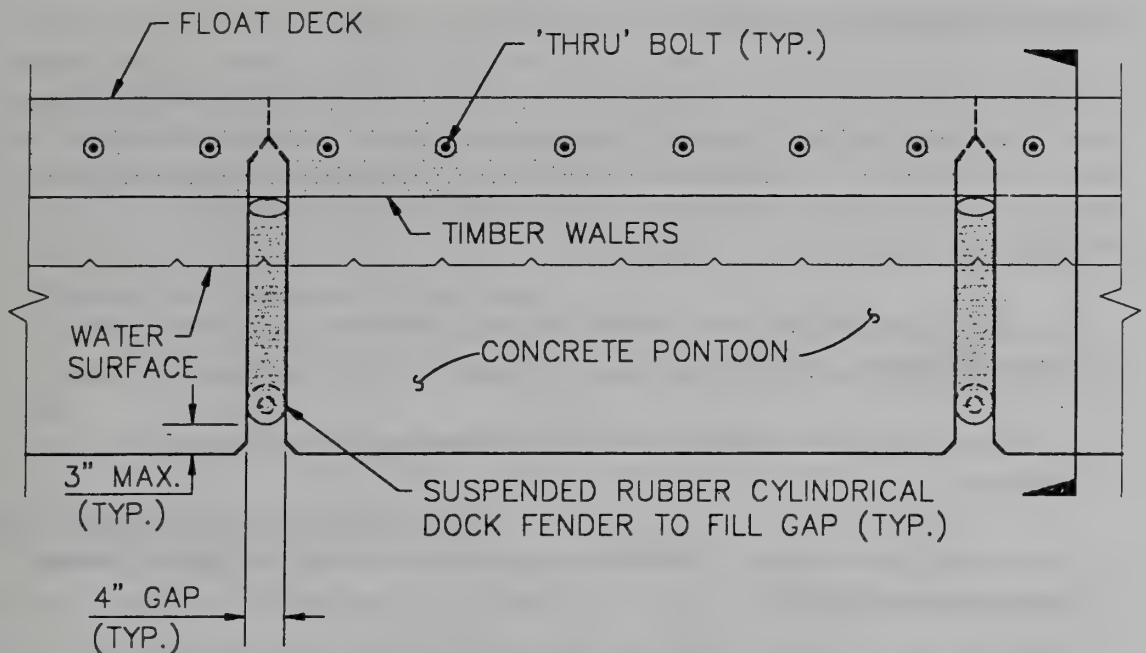
II. PROJECT DESCRIPTION

C. Proposed Project

The Hyde Street Pier reconstruction including the removal and relocation of existing rockfill, and replacement of existing wood pier structure with concrete piles, the walkways, and the floating docks are considered Bay fill/cover by the Bay Conservation and Development Commission (BCDC) regulations (see Table 3 above).

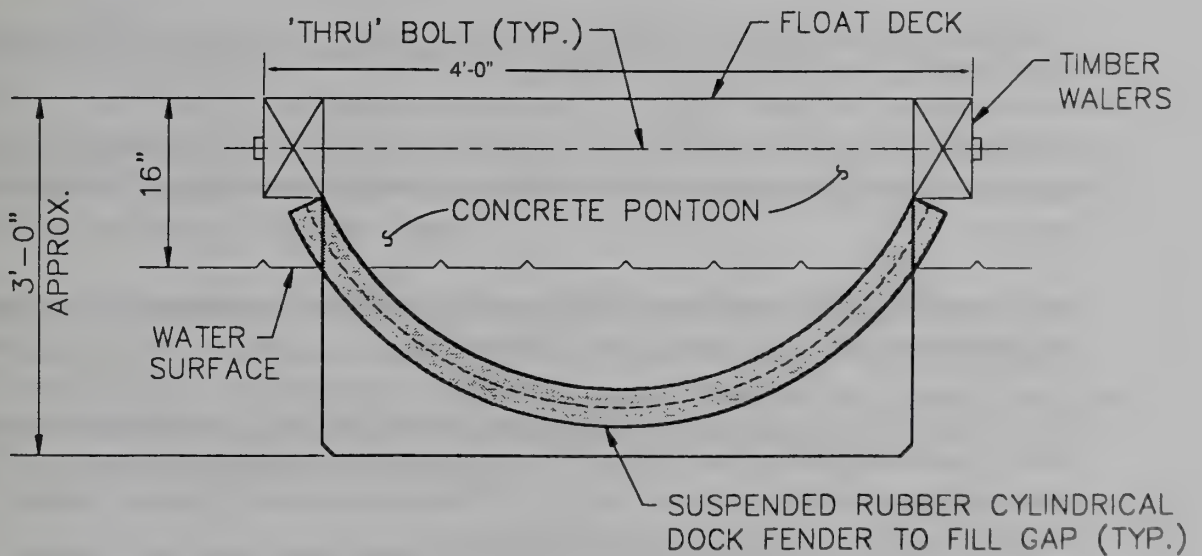
The proposed Hyde Street Fishing Harbor would include the following features:

- Berths for two boats would be enclosed on two sides by floats with encased foam pontoons that would ride slightly below the surface of the water. Double-boat berths would be 40 X 17 feet, 50 X 19 feet and 60 X 21 feet. Connecting walkways would be 4 feet wide.
- No berthing would be provided on the west side of the float closest to the Hyde Street Pier and Aquatic Park.
- The westernmost float would be fitted with a flexible "skirt" which would eliminate gaps between floats and provide a measure of water quality protection. (See Figure 7)
- A single security gate at the brow (shore end of the pier) would limit access to berth holders and harbor personnel.
- The berthing system would include lighting, electrical power, water and fire protection systems, and dock boxes for each berth.
- Impermeable surfaces would be designed to collect runoff in gutters located along the pier edge or in a central depression, to direct storm water to an oil-water separator before disposal to the Bay.



FLOAT ELEVATION (SKIMMER FLOAT ONLY)

SCALE: $3/4" = 1'-0"$



FLOAT SECTION

SCALE: $3/4" = 1'-0"$

**CROSS SECTION OF
FLOATING DOCK**

FIGURE NO. 7

HARBOR SERVICE FACILITIES

Proposed new Harbor Service Facilities would be located partially on new fill, described above under Hyde Street Pier Reconstruction. Facilities would include a work dock, vessel pump-out station, and restroom. The Harbor Master would remain in the recently refurbished space on Wharf J9, along Fish Alley. Public access for the harbor component of the project would be provided as shown on Figure 6.

- The existing fuel station building of 420 square feet, now located on a pile-supported pier, would be retained.
- A restroom of about 200 square feet would be provided near the fueling area for use by fishermen.
- The existing fuel dock area of 1,450 square feet would be provided with lighting and spill containment equipment.
- A new/replacement fuel delivery pipeline (about 140 feet long) from the seawall to the fuel dock would include automatic shut off features; a leak detection system; remote operated shutoff switch and pressure sensitive valves.
- A single security gate at the end of the pier would limit access to the dock and floating berths to permitted boat operators and harbor personnel.
- A vessel sewage pump-out station would be installed adjacent to the fuel dock area with a 20 gallon per minute (gpm) pump-out capability directly connected to the City's sanitary sewer system.
- An 40 square foot oily waste disposal facility would be provided in a clearly marked location in the working area and at an existing facility along Fish Alley.
- The dock area would have a central depression to direct storm water to an oil-water separator prior to disposal to the Bay. (See Figure 6) The work dock area would include space for public access, a hoist and net roller. The 30' x 50' area would be used to transfer supplies from boats, layout and repair fishnets and fishing gear.

- Parking for 21 vehicles (including five existing spaces which would be retained) is proposed over existing land and/or over relocated fill for use by fishermen. Additionally, 24 parking spaces would be provided in the location of the Bell Smoked Fish building at the backside of the building at 490 Jefferson. About 4,300 square feet of building structure would be demolished to make room for parking.
- Public access (3,000 square feet) would be provided at the foot of the new pier. The new berths would only be accessible to berth users.
- Fire safety ingress/egress from Hyde Street Pier would be permitted under an agreement with NPS.

PIER 45 / NEW USES IN SHEDS A AND C

The Port is proposing to develop uses complementary to the fishing industry on Pier 45 in Sheds A and C. Together these sheds contain approximately 140,000 square feet of ground floor area and space for a mezzanine of 50,000 square feet. They are adjacent to Sheds B and D which are renovated and leased for fish processing and fish handling. The existing uses of Sheds B and D would not change under the proposed project.

The Port is considering three alternative uses within Sheds A and C which range from 140,000 to 190,000 square feet (the latter includes development of a 50,000 square foot mezzanine area) of uses. The three alternative uses would each emphasize one of the following: a Fisheries Center; an Education Center or; a Conference Center. All three alternatives would include outdoor public access and parking, and some retail space.

The Port's preferred project for Sheds A and C is the Fisheries Center. (The other two use alternatives for Pier 45 being considered by the Port are described and evaluated in Section VII, ALTERNATIVES TO THE PROPOSED PROJECT). The Port has described a range of maximum intensity uses for the Sheds that would not be exceeded but development could occur at a lower intensity (some space may not be developed).

The purpose of the proposed Fisheries Center would be to educate the public about the fishing industry, allow observation of a working commercial fishing harbor and pier, and provide interpretation of the surrounding Bay and ocean environment. The Fisheries Center would include 40,000 square feet of Fisheries Center Event Space, 20,000 square feet of parking, 32,000 square feet of fish processing, 18,000 square feet of storage, 10,000 square feet of office

space and 45,000 square feet of outdoor public access space (see Figure 8). Improvements include restrooms, new partitions, plumbing and electrical systems. Following are descriptions of the Port's proposed Fisheries Center components:

Visitor Center -- about 40,000 square feet of space in Shed A would be dedicated to displays and exhibits to promote public education of the fisheries and seafood industries and the marine environment, that could include a 1,200 to 3,000 square foot interactive theater; 2,000 to 5,000 square feet of related retail space (gift shop and book store); a 2,000 to 4,000 square foot cafe or food service area.

Fish Processing -- about 32,000 square feet of Shed A would be converted to space appropriate for commercial fish processing. Industrial sewers and drains and epoxy floor covering would be added, similar to physical changes made to Shed B and D. Access to fish processing space would be by truck only, via the "valley" along Pier 45.

Office Space -- 10,000 square feet of space in Shed A would be created for maritime related users such as the Pampanito.

Outdoor Public Access -- 20,000 square feet of Shed A and 25,000 square feet of Shed C's pier apron would be used as a public promenade along the water's edge of Pier 45.

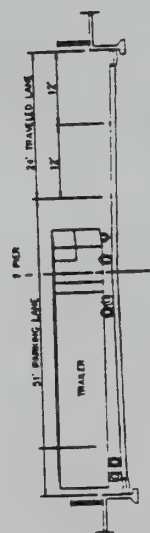
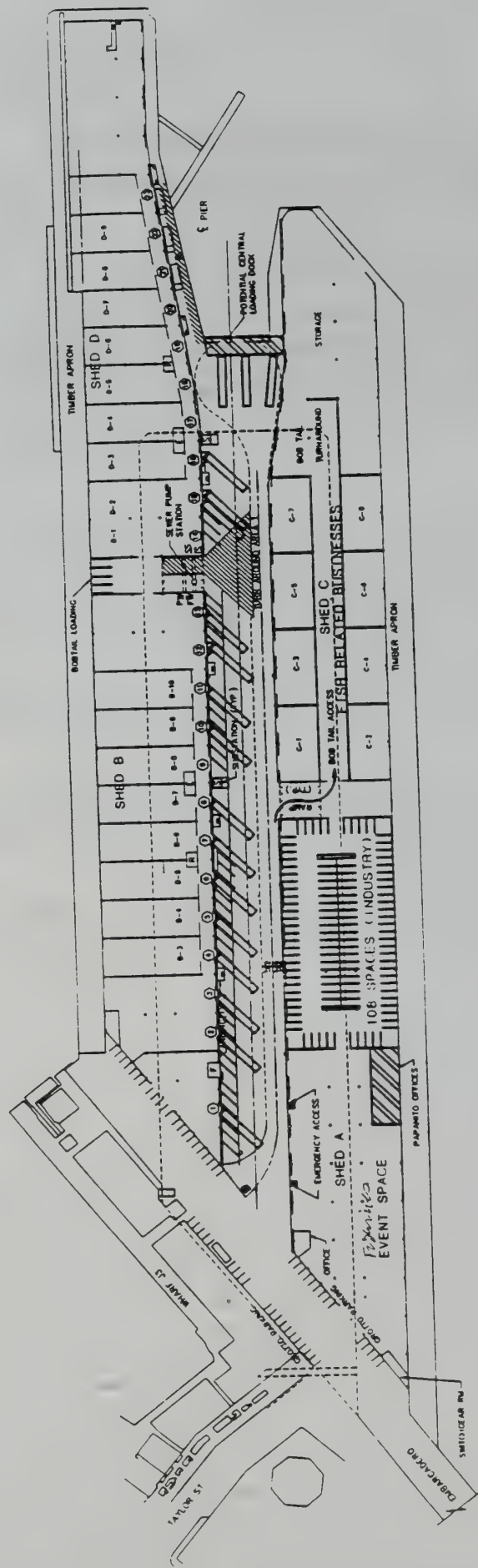
Parking - -- 108 parking spaces would be created for fishing industry employees in Shed A. The existing 68 spaces on the forepier would remain. These are permit spaces for lease tenants in all sheds on Pier 45.

II. PROJECT DESCRIPTION

C. Proposed Project

Truck loading area -- Service bays would be located for both Sheds A and C within the valley area. No parking would be provided in the valley for Sheds A and C to minimize conflicts with the fish processors' trucks using the valley.

Pampanito -- about 10,000 square feet of Shed A, along the east side, would be used by the National Maritime Museum Association (NMMA) under a lease agreement with the Port for a visitor gift shop and administrative support facility for the Pampanito submarine. The Pampanito would continue to be moored along the eastside of Pier 45 adjacent to Shed A where visitor access is provided along the apron.



TYPICAL VALLEY SECTION
(45° PARKING)

FIGURE NO. 8

FISHERIES CENTER ALTERNATIVE - PIER 45

D. PROJECT APPROVALS, SCHEDULE AND COSTS

The project site is on Port property and is under the jurisdiction of the City and County of San Francisco. After completion of the environmental review process, the project would be considered by the Port for approval. The Port Commission will be responsible for approving or not approving the proposed project and obtaining all necessary permits and authorizations.

The Draft EIR was distributed to all city, regional and state agencies and to the interested public for their review and comment. A public hearing before the City Planning Commission was held on the Draft EIR and responses to all written and oral comments are presented in Section IX. The EIR will be revised accordingly and presented to the City Planning Commission for certification. All city, regional and state agencies must review and consider the information contained in the Final EIR before making any decision to approve or permit the project.

In addition to Port Commission approval, various other city, state and federal agency actions and approvals would be required. The project site is within the Coastal Zone and is under the jurisdiction of the San Francisco Bay Conservation and Development Commission. The land underlying the harbor and piers is on state-owned tide and submerged lands under the jurisdiction of the State Lands Commission. In 1968 the state of California transferred the administration management and operation of Port property to the San Francisco Port Authority. While no permit would be required from the State Lands Commission the project would be reviewed by them prior to Port Commission action. Portions of the project site, as described below, are also under the jurisdiction of the Army Corps of Engineers.

Required approvals by local, regional, state and federal agencies for implementation of the proposed project are summarized below.

CITY AND COUNTY OF SAN FRANCISCO APPROVALSCity Planning Commission

The Port, as the project sponsor, must seek Conditional Use Authorization from the City Planning Commission for the non-maritime uses that may be proposed for Sheds A and C on Pier 45. Under Section 152 of the City Planning Code, two freight loading spaces meeting minimum dimensions specified under Section 152, would be required. In addition, vehicle parking would be required under Section 151 of the City Planning Code. Vehicle spaces would be required, depending on the final mix of proposed uses. Two hundred spaces are proposed as part of the project. The Provisions of the Northern Waterfront Special Use District #1 would enable the Commission to modify the amount of required parking and loading spaces (see Section 240.1 and 161(f) of the San Francisco Planning Code). At the discretion of the City Planning Commission, any potential shortfall in loading or parking proposed for the project could be waived through conditional use authorization.

On November 14, 1986, the voters of San Francisco passed Proposition M, the Accountable Planning Initiative. Proposition M establishes eight Priority Policies. These policies are: preservation and enhancement of neighborhood-serving retail uses; protection of neighborhood character; preservation and enhancement of affordable housing; discouragement of commuter automobiles, protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership; earthquake preparedness; landmark and historic building preservation; and protection of open space. Prior to issuing a permit for any project which requires an Initial Study under CEQA, and prior to adopting any zoning ordinance or development agreement, the City is required to find that the proposed project or legislation is consistent with the Priority Policies.

In November 1990, the voters of San Francisco passed Proposition H. This voter initiative mandates that a plan for the waterfront be developed and that uses of the waterfront be restricted to water oriented uses. The mandated Waterfront Land Use Plan is under development by the Port. The Port Commission would consider requirements of Proposition H and the draft Waterfront Land Use Plan in reviewing the proposed project.

The project will be reviewed by the Planning Commission and Department of City Planning in the context of applicable objectives and policies of the San Francisco Master Plan as part of considering a Conditional Use Authorization, if one is required by a proposal to include non-maritime uses. The Planning Commission may also determine an appropriate reduction in off-

street parking requirements. The *Northeastern Waterfront Plan*, adopted in 1977 and last amended in 1995 as an Element of the *San Francisco Master Plan*, addresses land use at the project site and includes a Fisherman's Wharf Subarea Plan. The Plan's objectives and policies are designed to enhance economic vitality of the area, diversify land uses in the Northeastern Waterfront area while enhancing maritime and port activities, improve the area's attractiveness and spatial identity, and improve transportation and circulation in the area.

The overall goals of the Fisherman's Wharf Subarea Plan are to maintain and enhance the area's maritime character and enhance it as a center for commercial fishing; strengthen the area's attractiveness as a water-oriented commercial recreation center; and develop uses that would generate activities at times other than the existing peak period. Objective 11 is to "maintain and enhance the character of the Fisherman's Wharf area and enhance the area as a center for the commercial fishing industry." Policy 1 is to "encourage the retention and expansion of the commercial fishing and fish handling industry and businesses which provide services to the fishing fleet through construction of a new breakwater in the general area of Hyde Street Pier." As noted above, the referenced breakwater has been completed. The additional fishing facilities proposed under the project appear to respond to this policy of the *Northeastern Waterfront Plan*. However, Policy 2 of this objective states "Permit commercial office (not related to the fishing industry), hotel and residential convenience retail, institutional and accessory parking uses on Pier 45. Parking shall be enclosed within a structure". The uses proposed by the Port would preclude these uses and a Master Plan Amendment would be required if the proposed project is to be approved.

Port Commission

The Port Commission must approve the proposed project, and expenditure of funds to build, before the project could be implemented. Lease agreements for uses that might be developed would also require Port Commission approval; any lease that would exceed the amount of \$1 million per year would also require approval by the San Francisco Board of Supervisors.

The Port Commission is responsible for implementing proposed mitigation measures attached to the project.

Art Commission

Review of the proposed project would be required from the San Francisco Art Commission, which reviews proposed construction on public land.

Other City Departments

The Port of San Francisco is empowered to authorize all structural, building, electrical, utility, fire and police permits. The Department of Public Health (DPH) regulates removal of underground storage tanks and disposal of hazardous wastes. DPH would review site history and soils reports for hazardous wastes prior to issuance of a building permit for site excavation work and fuel pipeline installation pursuant to Article 20 of the Public Works Code.

REGIONAL AND STATE AGENCY APPROVALSBay Conservation and Development Commission (BCDC)

The entire project site is within the Coastal Zone jurisdiction of BCDC, and a permit from BCDC would be required before the project could be implemented. The permit would address the project's compliance with the McAteer-Petris Act and with policies of the *San Francisco Waterfront, Special Area Plan (April 1975 as amended) Plan Map #1*, which covers the area of shoreline in which the project is located.

BCDC would be particularly concerned with issues relating to the addition of solid fill and pile-supported fill in the Bay; potential impacts on fish and wildlife and other natural resources; the provision of Bay-oriented commercial recreation or Bay-oriented public assembly; and the provision of public access to the Bay at Pier 45. Also, BCDC would inform the Port about project compliance with Section 307 of the Federal Coastal Zone Management Act of 1972.

The Port of San Francisco currently holds the following permits from BCDC for projects at Pier 45:

- Permit No M76-69, authorizing the construction of a chapel and the placement of a Fisherman's Memorial with public access on Wharf J-3.
- Permit No. M88-63, authorizing the placement of a temporary wharfinger's office (trailer) on Wharf J-3, until such time as a permanent office is constructed on the Pier.
- Permit No. M89-94, authorizing earthquake repairs to Pier 45, including the areas beneath Sheds A, B and C.

The authorized earthquake repairs were completed in August of 1995, as previously described.

The wharfinger's office was permanently located in a two-story building on Wharf J-7 along Fish Alley.

Prior to issuing a permit for the proposed project, BCDC will review: the amount of Bay fill that would result; the extent to which the project provides "maximum feasible public access" to and along the shoreline; enhancement of fishing industry uses; and provisions for public safety.

BCDC jurisdiction includes Bay waters up to the shoreline and the line 100 feet upland and parallel to the shoreline which defines the Commissions "shoreline band." The *April 1975 San Francisco Waterfront Special Area Plan* specifies uses for which fill may be permitted, including port facilities, water-related recreation, Bay-oriented commercial recreation and Bay-oriented public assembly. Limited commercial recreation facilities, such as small restaurants, can be permitted. The *1975 Plan* also includes specific policies for uses on new or replacement fill in the Fisherman's Wharf area. Appropriate uses for new or replacement fill include public access; fish processing; limited commercial recreation; and maritime and small-boat docking facilities, including tour boats and ferries.

Permitted uses on new or replacement fill at Hyde Street Pier include fish processing, limited commercial recreation, public access, replacement of existing bay-oriented commercial

recreation, and maritime. The San Francisco Waterfront Plan, *Special Area Plan (1975)* Hyde Street Pier Policy 1 states:

- "1. The reconstruction or improvement of the east side of Hyde Street Pier for fishing and fish processing should be permitted. It need not be rebuilt to its present configuration, but any new fill should be the minimum necessary. (page 15)"

Permitted uses on new or replacement fill at Pier 45 include public access, boat slips and maritime. *Special Area Plan* Policies 2 and 3 for Pier 45 state:

- "2. Development of Pier 45 should provide maximum public access at pier level. The public access should be an integral part of the pier development and should create varied and interesting open spaces for public access, including visual access, to the Bay, particularly at the end of the pier and along pier edges.
3. All areas devoted to public access on Pier 45 should be protected from the wind to the maximum extent feasible without unnecessarily blocking views. (page 17)"

Special Area Plan policies for Pier 45 also state that if reuse of Pier 45 requires new pilings to be driven into the water, uses over the pilings would have to be water-oriented. Proposed uses for Pier 45 under the project may not be consistent with BCDP *Special Area Plan* policies if public access provisions do not meet the above criteria or if uses over new pilings (driven during earthquake repairs) are determined to be non-water-oriented. Section 66605 of the McAteer-Petris Act provides that "further filling of San Francisco Bay should be authorized only when public benefits from fill clearly exceed public detriment from the loss of the water areas and should be limited to water-oriented uses."

California State Lands Commission

In 1968, the State of California, in accordance with the Burton Act and the accompanying Transfer Agreement, transferred the administration, management and operation of Port property to the San Francisco Port Commission. The Port Commission holds these lands in trust under the

jurisdiction of the State Lands Commission, which determines that the use of Port lands meets public trust provisions. Uses of these lands are limited to waterborne commerce, navigation, fisheries, open space, recreation, or other recognized public trust purposes. No permit would be issued by the State Lands Commission for the proposed project; however, the Port Commission must keep State Lands Commission apprised of its plans, particularly regarding uses proposed for Sheds A and C on Pier 45.

Regional Water Quality Control Board

The RWQCB is responsible for development, enforcement and implementation of state water quality standards as set forth in the Water Quality Control Plan for the *San Francisco Bay Basin (known as the Basin Plan)*. The RWQCB would therefore be concerned with the potential changes in the water quality to San Francisco Bay resulting from the proposed project. Under powers delegated by the U.S. Environmental Protection Agency and the State Water Resources Control Board, the RWQCB would also provide water quality certification for disposal of project-related dredge spoils.

California Department of Boating and Waterways

The California Department of Boating and Waterways would not issue any permits for the proposed project. It would review and comment on proposed design and operation in terms of consistency with State Harbor Standards. It is providing major funding for the Harbor's development.

California Endangered Species Act (Fish and Game Code 2050 et seq)

The California Endangered Species Act (CESA) establishes that it is the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that State agencies should not approve projects which would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. CESA requires State lead agencies to consult with the Department of Fish and Game (DFG) during the CEQA process to avoid jeopardy to threatened or endangered species. As an outcome of consultation, DFG is required to issue a written finding as to whether a project would jeopardize threatened or endangered species and to specify reasonable and prudent alternatives which would avoid jeopardy. CESA provides for joint consultations when species are listed by both the State and Federal agencies.

FEDERAL AGENCY APPROVALS

U.S. Army Corps of Engineers

Prior to project implementation, a permit would be required from The Army Corps of Engineers for proposed dredging, filling and new structures in navigable waterways. The Army Corps of Engineers has jurisdiction over fill, dredging and disposal of dredge spoils under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. All proposed work and/or structures extending bayward of the line on shore reached by mean high water of tidal waters must be authorized by The Army Corps of Engineers under Section 10.

U.S. Coast Guard

The U.S. Coast Guard's primary responsibility is to preserve and enhance the navigability and safety of navigable waters of the United States. The Coast Guard would not issue any permits for the project, but could review and comment on proposed design and operation of the harbor in terms of its potential effect on navigation and safety in adjoining waterways.

Federal Endangered Species Act of 1973 (16 USC 1531-1543)

This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Section 7 of the act requires Federal agencies, in consultation with and with the assistance of the Secretary of Interior, to insure that actions they authorized, fund or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. Regulations governing interagency cooperation under Section 7 are found in the Code of Federal Regulations Part 402.

III. ENVIRONMENTAL SETTING

A. LAND USE, ZONING AND PLANS

As described below, and at the beginning of Section IV, Land Use and Zoning were among the issues determined as a result of the Initial Study to require no further discussion in this Environmental Impact Report (EIR). The information on land use and zoning in this subsection is included to orient the reader to land use in the project vicinity. The proposed project would require an amendment to the Master Plan. This amendment, and compatibility with existing plans and policies is discussed below.

LOCAL AND REGIONAL SETTING

The site of the proposed project is on San Francisco's northern waterfront within the Fisherman's Wharf area. This area encompasses approximately 374 acres of land and water generally bounded by Pier 35 on the east; Aquatic Park on the west; the Pier Head Line in San Francisco Bay on the north; and North Point, Bay and Francisco Streets on the south. About 175 acres of the Fisherman's Wharf area are land (including piers) and the rest are water. A majority of the land area is under City Planning or Port of San Francisco jurisdiction, and roughly 10 percent is under U.S. National Park Service jurisdiction. Water areas within the Fisherman's Wharf area are under Port and U.S. National Park Service jurisdictions.

Historically, the Fisherman's Wharf area was a center of fishing- and maritime-related industries such as boat repair, maritime equipment supply, and fish processing and canning. Although much of its development since the mid-1960s has been tourist-serving, Fisherman's Wharf still has the largest concentration of fish distributors and brokers on the west coast and is the center of the San Francisco Bay Area's fishing industry. Within the San Francisco Bay region, Fisherman's Wharf is advantageously located for the fishing industry due to its proximity to the Sacramento River Delta, the Pacific ocean via the Golden Gate, and major regional seafood markets.¹

¹ Fisherman's Wharf Harbor Feasibility Study, Moffatt & Nichol, Engineers, et al, June 1, 1988.

Fisherman's Wharf Area Uses Under Port Jurisdiction

The portion of the Fisherman's Wharf area under Port jurisdiction includes piers, shoreline, waterfront extending bayward to the U.S. Pier Head Line, the underground seawall along the Embarcadero Roadway, and seawall lots adjoining the Embarcadero. The Port jurisdiction area includes a mix of commercial maritime, fishing-related and tourist-serving retail and restaurant uses. At Pier 39, a specialty retail/restaurant complex developed in the late 1970's, is a marina with 350 berths for recreational boats. The Pier 39 marina, within a mile of the project site, has two vessel pump-out stations and a boat that provides pump-out services to vessels in the harbor. Ten live-aboards are allowed to berth at the Pier 39 marina.

In addition to Pier 39, several other concentrations of tourist-serving commercial development are in the portion of the Fisherman's Wharf area under Port jurisdiction. These are at the north end of Taylor Street and along the north side of Jefferson Street west of Mason Street, adjacent to the project site. Other prominent activities on nearby Port properties include the Pier 39 parking garage, surface parking on the Triangle area adjacent to Pier 45 and on Piers 43 and 43-1/2, and tourist-serving ferry facilities along the waterfront between Pier 41 and 45. On Pier 43, adjacent on the east to Pier 45, is the Red and White Fleet tourist boat berth.

Fisherman's Wharf Area Uses Under U.S. National Park Service and San Francisco Recreation and Park Department Jurisdiction

Areas adjacent to the project site to the west are under San Francisco Recreation and Park Department and National Park Service jurisdiction. Principle uses include:

- San Francisco National Maritime Historical Park on Hyde Street Pier, leased by the U.S. National Park Service from the Port of San Francisco and used to moor historic ships and boats;
- Aquatic Park, a 10.7-acre public swimming and recreation area under the jurisdiction of the U.S. National Park Service;
- Municipal Pier, a public fishing spot under the jurisdiction of the U.S. National Park Service;

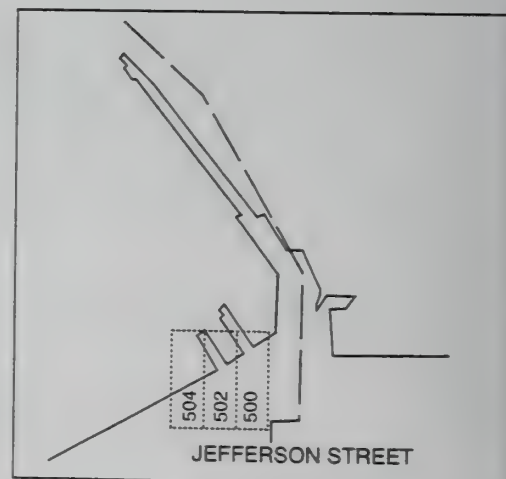
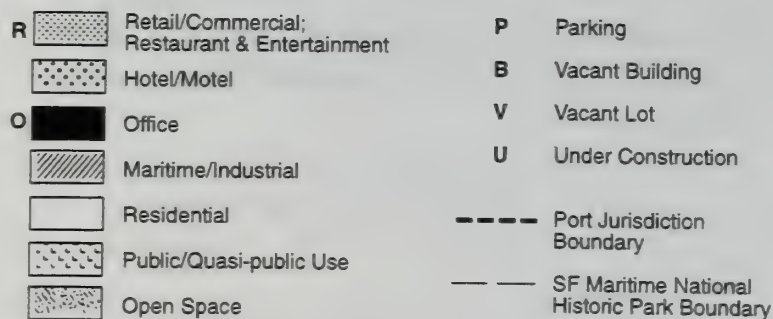
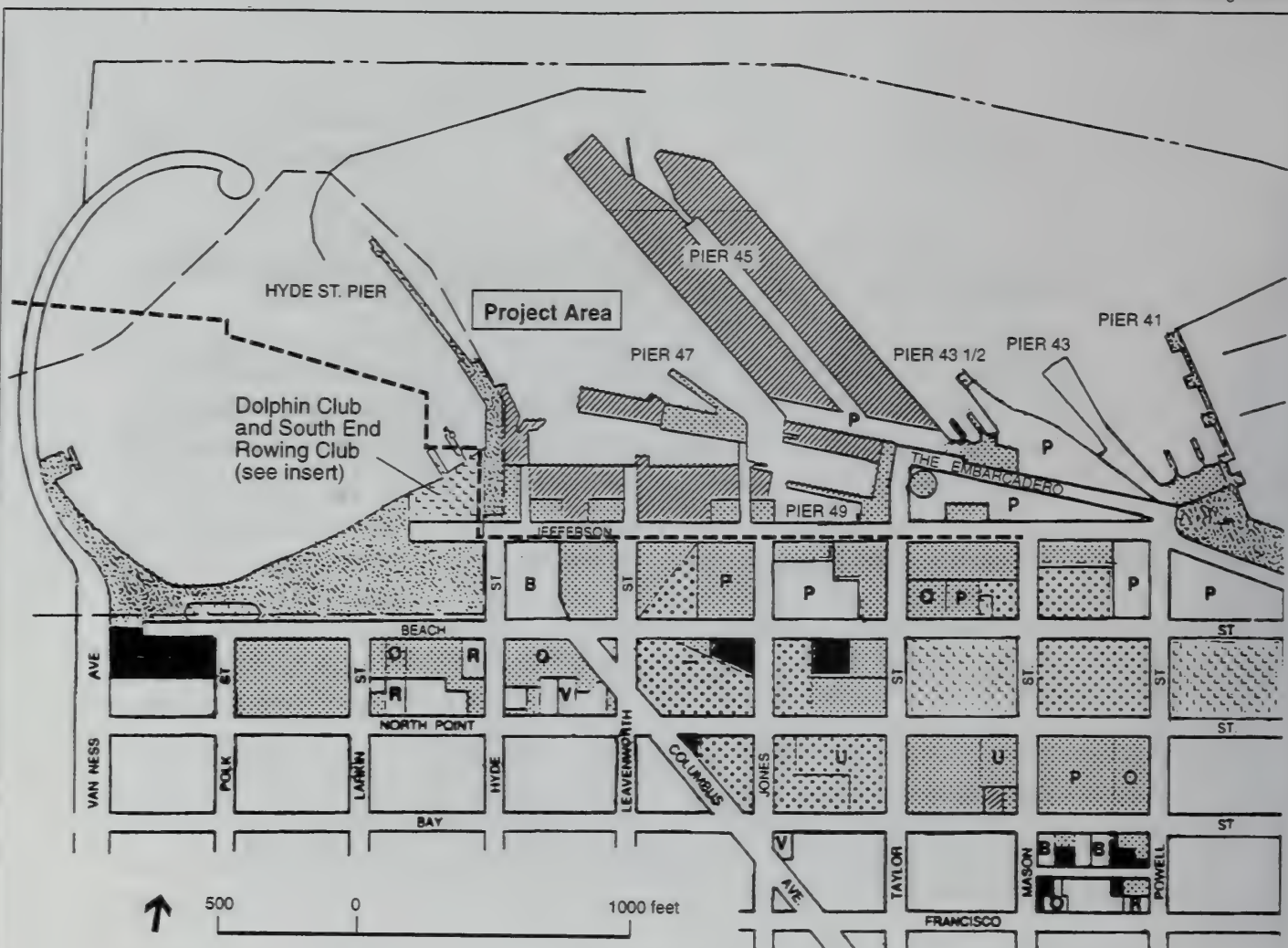
- San Francisco Senior Center and the Maritime Museum, housed in the former Aquatic Park Bathhouse under the jurisdiction of the U.S. National Park Service; and
- The private Dolphin and South End Swimming and Rowing Clubs, adjacent to Aquatic Park and Hyde Street Pier (these Clubhouses located on parcels 500, 502 and 504, are under jurisdiction of the San Francisco Recreation and Park Commission on land zoned P - Public Use and leased to the Clubs). See Figure 9.

Fisherman's Wharf Area Uses Under City Planning Jurisdiction

In the area under City Planning jurisdiction which surrounds the project site, principal land uses are hotels, specialty retail/restaurant complexes, food service, and entertainment establishments. Commercial developments in the Fisherman's Wharf area include hotels, North Point Shopping Center, Cost Plus Imports retail store, and three specialty retail/restaurant complexes (Ghirardelli Square, the Cannery and the Anchorage). Residential and public infrastructure uses include the 514-unit North Point Apartments, the 229-unit North Beach Place public housing project, the San Francisco Municipal Railway (MUNI) Kirkland Bus Yard, and the North Point Water Pollution Control Plant (see Figure 9).

EXISTING PROJECT SITE USES

Within the larger Fisherman's Wharf area, the project site is bounded by a breakwater and the San Francisco Bay to the north, the San Francisco Maritime Park-Hyde Street Pier and Aquatic Park to the west, Jefferson Street to the south, and Taylor Street to the east (see Figure 2, Section II, PROJECT DESCRIPTION, page 35).



GENERALIZED LAND USE IN PROJECT AREA

FIGURE NO. 9

Project Site Fishing and Maritime/Industrial Uses

Although fishing-related activities and other distribution, transportation, and industrial uses have declined in the Fisherman's Wharf area, what remains of these uses is concentrated in the area known as the Working Wharf: Piers 45, 47 and 49, Fish Alley (Seawall Lots 302 and 303), and the adjacent water and berthing space. The Working Wharf is a fish distribution center for the San Francisco Bay Area and source of seafood for Wharf area restaurants and sidewalk crab stands. Current types and levels of fishing-related activities are described in more detail in the PROJECT DESCRIPTION; as noted, about three million pounds of fish were landed at the Wharf in 1993. Fish are also brought in by truck overland from the airport and from other ports to process and trade. Some of this trading currently takes place during the early morning hours from trucks parking along Jefferson Street near Fish Alley. This truck trading activity may relocate to the "valley" area on Pier 45 and to the parking triangle adjacent to Pier 45. Fish Alley comprises a dense assortment of fishing industry-related uses as well as the abandoned Bell Smoked Fish building (approximately 4,300 square feet). The Bell Smoked Fish building would be demolished and replaced by surface parking for fishermen under the proposed project. (Figure 5, Page 15)

Prior to the 1989 Loma Prieta earthquake, as described in the PROJECT DESCRIPTION, uses in and adjacent to the four Pier 45 sheds included both fishing-related and other uses. Sheds B and D were used primarily for fish processing and handling, and parking for fishermen; these uses were displaced because of earthquake damage and are returning to the repaired and upgraded sheds. No additional changes to Sheds B and D are proposed as part of the project.

In addition to fish processing and distribution activities, the Fisherman's Wharf area contains harbor service facilities needed to support working fishing vessels. Proposed for expansion and improvement as part of the project, these facilities include docks and vessel berthing space, ice, fuel and other supplies, and waste disposal facilities.

Other Project Site Uses

In addition to fishing-related uses, the Working Wharf area contains a mix of other uses such as tourist-serving retail, restaurant and entertainment; office; recreation, open space and public

III. ENVIRONMENTAL SETTING

A. Land Use, Zoning and Plans

access; and transportation and parking. The tourist-serving uses within the project site are concentrated along Jefferson Street, but restaurant uses also are on Pier 47, which separates the Inner and Outer Lagoons.

Sheds A and C, totaling about 140,000 square feet on the ground floor (plus about 50,000 square feet of potential mezzanine space) on the east side of Pier 45, were partially vacant and contained a mixture of uses prior to the 1989 earthquake. These uses included support space for ferries and other vessels (Pampanito historic submarine), office space for area merchants, space for special events, and vehicle parking. The "valley" between sheds A/C and B/D, and the space landward of the sheds, are also used for vehicle access and parking.

SAN FRANCISCO ZONING AND PLANS

The City Planning Code, which incorporates by reference the City's Zoning Maps, governs permitted uses, densities and the configuration of buildings within San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless either the proposed action conforms to the Planning Code, or an exception is granted pursuant to provisions of the Code. Entitlements, such as conditional use authorizations, are the province of the City Planning Commission. On Port property, building permits are issued by the Port.

The project site is in a C-2 (Community Business) use district and a 40-X height and bulk district, and Northern Waterfront Special Use District No. 1. In a C-2 district, professional and business offices, retail business and personal services, residential and hotel uses are permitted as principal uses. The 40-X height and bulk district, which controls San Francisco's entire Northern Waterfront area, allows a maximum height for buildings of 40 feet above the street, and does not limit building bulk. The proposed project would not conflict with any C-2 or 40-X district regulations.

Provisions of the Northern Waterfront Special Use District No. 1, described in Section 240.1 of the City Planning Code, supersede those of the C-2 District. The purpose of the Special Use District is to address the waterfront's special uses, traffic, and parking issues, and to protect its

distinct maritime character from adverse adjacent development. The applicable provisions of Section 240.1 state that conditional use authorization from the City Planning Commission is required for allowable uses other than "waterborne commerce and navigation, and industrial, commercial and other operations directly related to the conduct of waterborne commerce or navigation." The project would therefore require conditional use authorization if non-maritime-related uses (meeting facilities, retail, food service) are included. The project would also require an amendment to the Northeastern Waterfront Area Plan of the Master Plan of the City and County of San Francisco which designates hotel, commercial office and residential uses on Pier 45.

Formal consideration by the Port Commission of any of the alternative uses proposed for Pier 45 Sheds A and C (Education Center, Conference Center or Fisheries Center), could require Planning Commission review to determine if the proposed uses can be considered maritime-related and if not, whether conditional use authorization should be granted. If commercial or retail uses were included, off-street loading and parking spaces in accordance with C-2 district regulations would apply. In making its determination, the Planning Commission would also take into consideration the directives of Proposition H, as passed by City voters in November, 1990. This voter initiative mandates that a plan for the waterfront be developed and that uses of the waterfront be restricted to water-oriented uses until such time as the plan is approved.

CURRENT AND PROBABLE FUTURE PROJECTS IN THE PROJECT VICINITY

Underwater World Aquarium at Pier 39

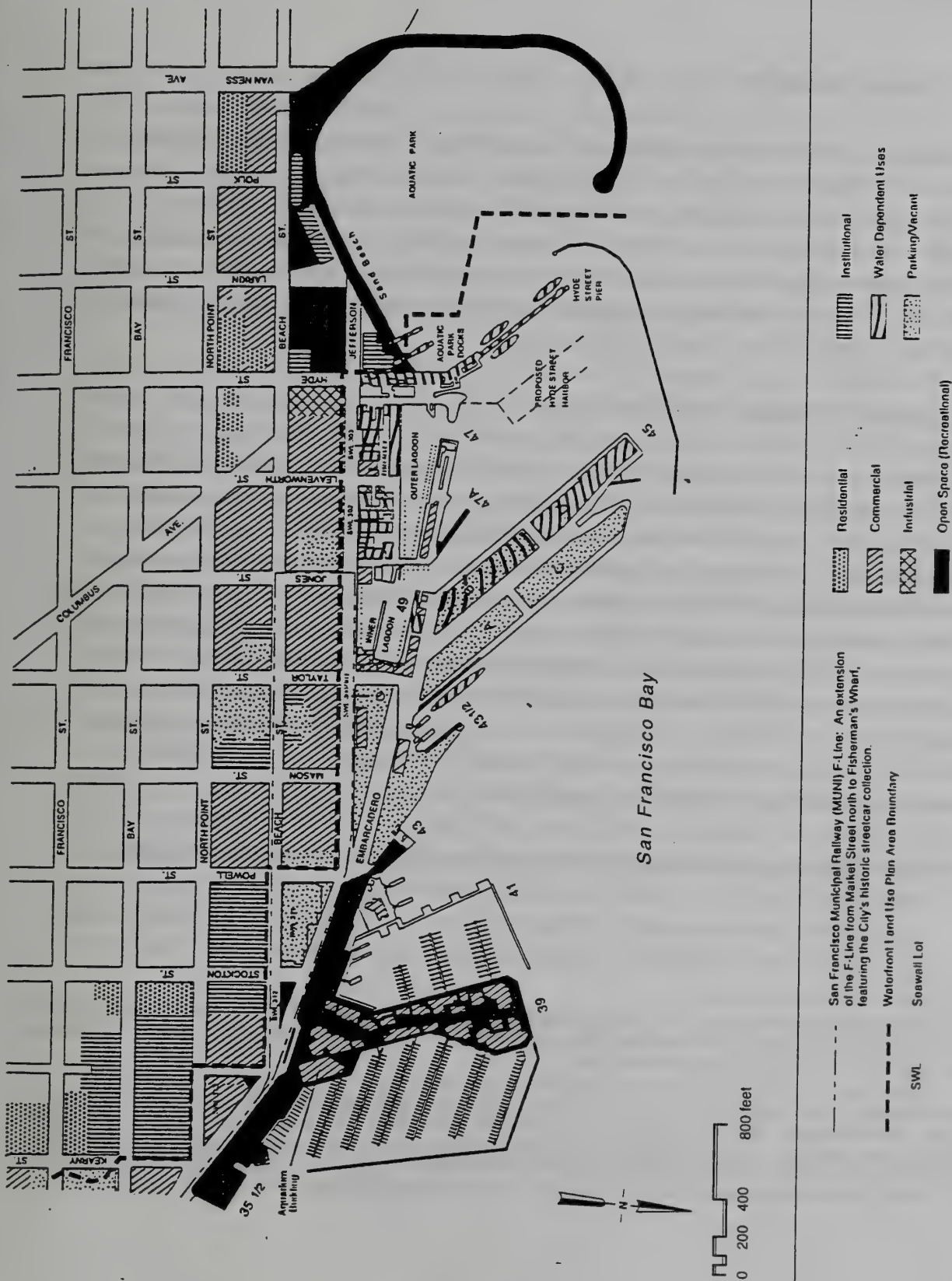
The Underwater World Aquarium at Pier 39 has been under construction since 1990 and is scheduled for completion in 1996. The 48,200 square foot facility includes a public lobby and circulation space, a book shop, office and staff space, exhibit area, a large (9,500 gsf) tank, a tidal pool, tank service area and ancillary space. The project also includes expansion of the existing Pier 39 parking garage by 120 spaces and has caused 400 spaces of the AMPCO parking garage to be opened for public use on weekends.

Port of San Francisco (Draft) Waterfront Land Use Plan

The project site is within the Fisherman's Wharf Subarea of the Port's Waterfront Land Use Plan Area. Not yet adopted, this plan proposes a variety of uses on selected "opportunity sites" in the plan area. Figure 10 shows the generalized land uses in the Fisherman's Wharf subarea. The Proposed Land Use Plan would amend Policy 2 (Objective 11) which specifies uses for Hyde Street Pier and Fish Alley, to permit other maritime and non-maritime adaptive uses of Fish Alley facilities if there is insufficient fishing industry demand and would also create a new policy to address Pier 45 separately from Hyde Street Pier and Fish Alley. The new policy would revise the list of land uses encouraged for this facility to instead give priority to fishing industry uses in Sheds B and D of Pier 45, and permit maritime offices; retail, research, educational assembly and entertainment and institutional uses; parking; and visitor centers compatible with the fishing industry in Sheds A and C. Environmental review of the Waterfront Land Use Plan will include a general discussion of potential cumulative impacts of the proposed Hyde Street Harbor and Pier 45 project.

San Francisco Maritime National Historical Park (Draft General Management Plan)

In June of 1996 (after publication of the DEIR for Hyde Street Fishing Harbor/Pier 45 Sheds A and C), the National Park Service published the DEIS for the San Francisco Maritime National Historical Park. The Draft EIS presents three alternatives for management, use, and preservation of resources and developed areas within San Francisco Maritime National Historical park. Primary resources and developed areas within the Park include historic vessels, museum collection, small watercraft, historic documents, library, Aquatic Park, Victorian Park, and Hyde Street Pier. The proposed action (Alternative A) would emphasize the preservation and maintenance of the Park's collection, including the fleet of historic vessels, small watercraft, library and archival materials. Greater use of the Park's collection by the public for research and interpretive purposes would be provided through the use of additional facilities, including rehabilitation of the Haslett Warehouse. A distinct 19th century San Francisco design theme would clearly establish the exceptional maritime identity of the park. The EIS describes the Hyde Street Fishing Harbor on page 24 as proposed in the Initial Study, with the Harbor Masters Building and new fuel station and parking for 40 vehicles.



San Francisco Municipal Railway (MUNI) F-Line: An extension of the F-Line from Market Street north to Fisherman's Wharf, featuring the City's historic streetcar collection.

Waterfront Land Use Plan Area Boundary

SWL

Seawall Lot

FISHERMAN'S WHARF SUBAREA: GENERALIZED EXISTING LAND USE

FIGURE NO. 10

B. WATER QUALITY

This section summarizes portions of the *Water Quality Study for Fisherman's Wharf Hyde Street Harbor & Pier 45*¹ which was prepared to address water quality conditions in the project area.

This section describes the following: the water quality regulatory framework; the physical conditions affecting water quality; existing water quality conditions in the project area based on results of water quality sampling conducted in the project area in May 1995; a public health and marine biota evaluation of existing water quality; a statistical evaluation of the bacteriological water quality; and results of previous water quality samplings.

WATER QUALITY REGULATORY FRAMEWORK

Regulatory standards for water quality in San Francisco Bay are established by the *Water Quality Control Plan for the San Francisco Bay Basin* (known as the "Basin Plan"), which is developed and implemented by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB).² The Basin Plan specifies beneficial uses of receiving waters, water quality objectives imposed to protect the designated beneficial uses, and strategies and schedules for achieving water quality objectives. It includes narrative and numerical objectives designed to provide protection for all designated and potential beneficial uses in San Francisco Bay. The RWQCB is also responsible for permitting waste discharges and implementing monitoring programs for pollutant effects. For example, as required by the RWQCB, the Port has in place a Stormwater Pollution Prevention Plan and Best Management Practices plan for its facilities and it includes tenants such as the fish processors on Pier 45.

In 1993, the RWQCB initiated a Regional Monitoring Program for the San Francisco Estuary,

¹ Orion Environmental Associates, et. al., 1996. *Water Quality Study for Fisherman's Wharf Hyde Street Harbor & Pier 45*. Prepared for the Port of San Francisco and the San Francisco Planning Department. January 1996. Available for review at the Planning Department, 1660 Mission Street, in the project file #93.574E.

² California Regional Water Quality Control Board, San Francisco Bay Region, 1986 and subsequent amendments. *Water Quality Control Plan, San Francisco Bay Basin Region (2) and 1995 Basin Plan Amendments*. The Basin Plan was originally adopted and approved in 1986 and has been subsequently revised and amended a number of times. The most recent updated amendments were adopted by the RWQCB on June 21, 1995 and approved by the State Water Resources Control Board on July 20, 1995. Final approval by the State Office of Administrative Law and the U.S. Environmental Protection Agency is expected in early 1996.

which focuses on pollutant concentrations in water, sediment, and tissues, and their potential effects at selected stations in the Bay and estuary.³ The purpose of the program is to evaluate the effectiveness of RWQCB water quality programs in meeting Basin Plan objectives including protection of the beneficial uses of the Bay. The program is establishing a database on water quality and sediment quality in the estuary, particularly with regard to toxic and potentially toxic trace elements and organic contaminants. Data from the Regional Monitoring Program at the two stations closest to the project area (Richardson Bay and Yerba Buena) are used in this report as an indication of background concentrations of chemicals found in the Bay.

Under the federal Clean Water Act, the U.S. Environmental Protection Agency, Region IX (EPA) also has jurisdiction over water quality in San Francisco Bay. The EPA is currently in the process of developing a comprehensive set of receiving water quality criteria, as required under the federal Clean Water Act, that is expected to be imposed on the State of California in the near future. The new criteria would be an amendment to the 1992 National Toxics Rule which promulgated numeric water quality criteria for toxic pollutants. The National Toxics Rule includes aquatic life water quality criteria for metals, and there is ongoing discussion as to the appropriate chemical form for establishing criteria for these metals (see discussion below). In May 1995, the EPA issued metals criteria for aquatic life which reflect EPA's current policy for setting water quality criteria for metals. This interim final rule, effective April 15, 1995, established metals criteria that are protective of aquatic life and are intended to approximate the fraction of waterborne metals biologically-available to aquatic organisms.⁴

Dredging activities, such as those associated with the proposed project, could affect water quality and are regulated by the U.S. Army Corps of Engineers (COE) as well as by the RWQCB. The COE has jurisdiction over issuance of permits for dredging activities affecting navigable waters as well as regulating diking, filling, placement of structures or other work in these waters. Under Section 404 of the Clean Water Act, the COE has authority to issue permits for discharge of dredged or fill material into inland and near coastal waters. Applicants for permits are

³ San Francisco Estuary Institute, 1994. *1993 Annual Report, San Francisco Estuary Regional Monitoring Program for Trace Substances*. December 1, 1994.

⁴ Federal Register. 40 CFR Part 131, Water Quality Standards, Establishment of Numeric Criteria for Priority Toxic Pollutants, May 4, 1995.

required to satisfy several conditions intended to prevent “unacceptable adverse effects” on the aquatic environment. Dredging activities are also within the purview of the RWQCB, which must verify that a dredged material discharge will not violate water quality standards. The RWQCB must grant Water Quality Certification for dredging and disposal activities in the San Francisco Estuary. Decisions to grant Water Quality Certification are based upon assessment of the potential for dredging and dredged material disposal to result in violations of water quality objectives.

As part of their combined sewer overflow discharge permit requirements by the RWQCB, the City and County of San Francisco, Department of Public Works conducts bacteriological monitoring of the nearshore recreational waters (including Aquatic Park) about three times per week to assure adequate water quality for water contact recreation (e.g., swimming). The monitoring results are used by the Department of Public Works to determine if bacteria concentrations exceed safe levels for swimming. If warranted, based on the monitoring results, the department posts the beaches with signs that provide public notice of potential health hazard. Bacteriological monitoring was formerly also conducted at other locations along the City’s waterfront, including the Fisherman’s Wharf and Hyde Street Harbor/Pier 45 area, from 1991 to 1994. Results of recent years of sampling in the project area are discussed below under *Existing Water Quality Conditions, Coliform Sampling*.

EXISTING PHYSICAL CONDITIONS

Water quality in San Francisco Bay in the vicinity of Fisherman’s Wharf and Aquatic Park is affected by a number of physical factors, including tides, currents, waves, water depth (bathymetry), circulation and flushing, and sediment quality. These factors, along with existing water quality conditions are discussed below.

Tides and Currents

There are two daily tidal cycles in San Francisco Bay, with two ebb tides (outgoing or falling tides) and two flood tides (incoming or rising tides) which are associated with two high and two low water levels each day of varying heights. Changes in winds and barometric conditions can

also cause variation in the tide level from day to day. Tidal currents in San Francisco Bay are related to the tides, though they are also affected by wind or river or stream discharges from land.

Current behavior within a semi-enclosed basin, such as the project area, is influenced by a number of factors, including the size of the opening to the Bay, configuration of the breakwater, and other basin structures. The behavior of the current, in turn, influences the sedimentation and water quality characteristics within the basin by affecting circulation, flushing action and water exchange.⁵

Tidal flushing in the inner lagoons is not as good as that in the Outer Harbor and results in relatively poor water quality in those areas. Measurements of tidal current velocities were taken in 1987 at the Hyde Street Pier during the high tides and indicated that the maximum flood current speed is larger than the maximum ebb current speed. Current action within the basin is inhibited relative to the open water area and maximum current velocities of over 3 feet per second are possible in the berthing area. Water movement from currents flows from the Outer Harbor toward Aquatic Park during an ebb tide and in the reverse direction during a flood tide.

Waves

Waves in the project area may be locally generated wind waves, longer period waves generated in the Pacific Ocean, or ship-induced waves. Previous studies have determined that locally-generated wind waves are more critical on wave activity within the Fisherman's Wharf basin than longer period waves emanating from the ocean.⁶ These local wind waves are not estimated to exceed approximately 1.5 feet in height within the harbor area and would be expected to occur from the northwest. Ship-induced waves resulting from boat traffic outside the harbor have short periods and can be considered to be similar, but less critical, than locally

generated wind waves; waves generated by boat traffic within the harbor are suppressed due to restrictions on vessel speed.⁷

⁵ Moffatt & Nichol Engineers, AGS and Kwan Henmi Architecture, 1988. Fisherman's Wharf Harbor Feasibility Study. Prepared for the Port of San Francisco, California, June 1, 1988.

⁶ Moffatt & Nichol Engineers, AGS, and Kwan Henmi Architecture, 1988, III-10. Fisherman's Wharf Harbor Feasibility Study. Prepared for the Port of San Francisco, California, June 1, 1988.

⁷ Moffatt & Nichol Engineers, AGS, and Kwan Henmi Architecture, 1988. Fisherman's Wharf Feasibility Study. Prepared for the Port of San Francisco, June 1, 1988.

Bathymetry

The Port periodically conducts a survey of water depths (bathymetric survey) as part of its maintenance dredging program. A bathymetric survey was also conducted with regard to the construction of the breakwater. A survey conducted in January 1991 indicated that the water depths in the Inner Lagoon range from 8 to 10 feet (below mean lower low water, MLLW) at the landward side of the lagoon and from 6.9 to 12.2 feet at the side nearest Pier 45. In the Outer Lagoon, the water depths ranged from 10.8 to 14.6 feet (MLLW). In all cases, water depth was greater at the entrance to the lagoon than in the inner part of the lagoons. A bathymetric survey performed in July 1994 showed that between Pier 45 and the Hyde Street Pier, the depths range from 11 to 19 feet below mean lower low water.⁸

Circulation/Flushing

In 1988, the Port examined the effects of an existing tidal culvert on water quality in Fisherman's Wharf Harbor.⁹ The tidal culvert, shown on Figure 3, PROJECT DESCRIPTION, consists of a 3.8- by 6.0-foot concrete rectangular box culvert that was constructed as part of Pier 45 in the late 1920s. Measurement of currents at the culvert entrance showed that currents were up to 1.2 feet per second into the Inner Lagoon and 1.4 feet per second out of the Inner Lagoon, predominantly due to tides.

A numerical model was used to estimate the effect of the culvert on the residence time of water in the Inner Lagoon as a measure of flushing in the lagoon. Residence time is defined as the average time required for complete exchange, or renewal, of water in an enclosed area. The results indicated that for average tidal conditions, the residence time in the Bay east of Pier 45 is 1 to 2 hours, compared to 1 to 2 days and 2 to 3 days for the Inner and Outer Lagoons, respectively.

The actual residence times varies for different tidal conditions, decreasing during spring tides (the highest and lowest tides) and increasing during neap tides (lowest level of high

⁸ Advanced Biological Testing, 1995. *Results of Chemical, Physical and Bioassay Testing of Sediments Proposed for Maintenance Dredging at Fisherman's Wharf, Port of San Francisco*. January 12, 1995. Available for review at the Planning Department, 1660 Mission Street, San Francisco in project file 93.574E

⁹ Moffatt & Nichol Engineers, 1988. *Investigation of the effects of a tidal culvert on water quality in Fisherman's Wharf Harbor, Port of San Francisco*. Moffatt & Nichol Engineers, Walnut Creek, CA. November 1988.

tide). Water quality conditions in the Outer Harbor area are and have been generally better than water quality in the Inner and Outer Lagoon areas due to greater tidal flushing action.

Sediment Quality

Chemical and physical analyses and bioassays were conducted on sedimentary material at Fisherman's Wharf in 1994 in the Outer Lagoon and Outer Harbor areas (near Pier 47) as part of a maintenance dredging project. The data indicated that the concentration of chemicals in the sediments from this area were generally within normal limits for San Francisco Bay sediments (see Table 2, Appendix B). The samples were analyzed for a wide range of metals, pesticides and other organic compounds, and only the following chemicals were detected in the sediment: antimony, cadmium, chromium, copper, lead, mercury, nickel, silver, zinc, polynuclear aromatic hydrocarbons (PAHs), organic tin compounds, phthalates, sulfides, total recoverable petroleum hydrocarbons, and total organic carbon. The results of the physical testing indicated that the sediments in the project area were predominantly finer grained sediments of clay and silt (about 80 percent), with a lower percentage of coarser grained sand compared to sediments from a reference site near Alcatraz which had about 2 percent fine particles. The bioassay tests indicated that limiting permissible concentrations were not exceeded in the toxicity testing.¹⁰

EXISTING WATER QUALITY CONDITIONS

Water quality sampling was conducted by Woodward-Clyde Consultants on May 10, 1995 in the vicinity of Pier 45 and the Hyde Street Harbor to provide water quality information for comparison with previous sampling data and for an indication of existing conditions.¹¹ The sampling plan and results are summarized below.

The purpose of the water quality sampling was to: (1) assess water quality in the project area

¹⁰ Advanced Biological Testing, 1995. Results of Chemical, Physical and Bioassay Testing of Sediments Proposed for Maintenance Dredging at Fisherman's Wharf, Port of San Francisco. Prepared for Port of San Francisco, January 12, 1995. Available for review at the Planning Department, 1660 Mission Street in the project file #93.574E.

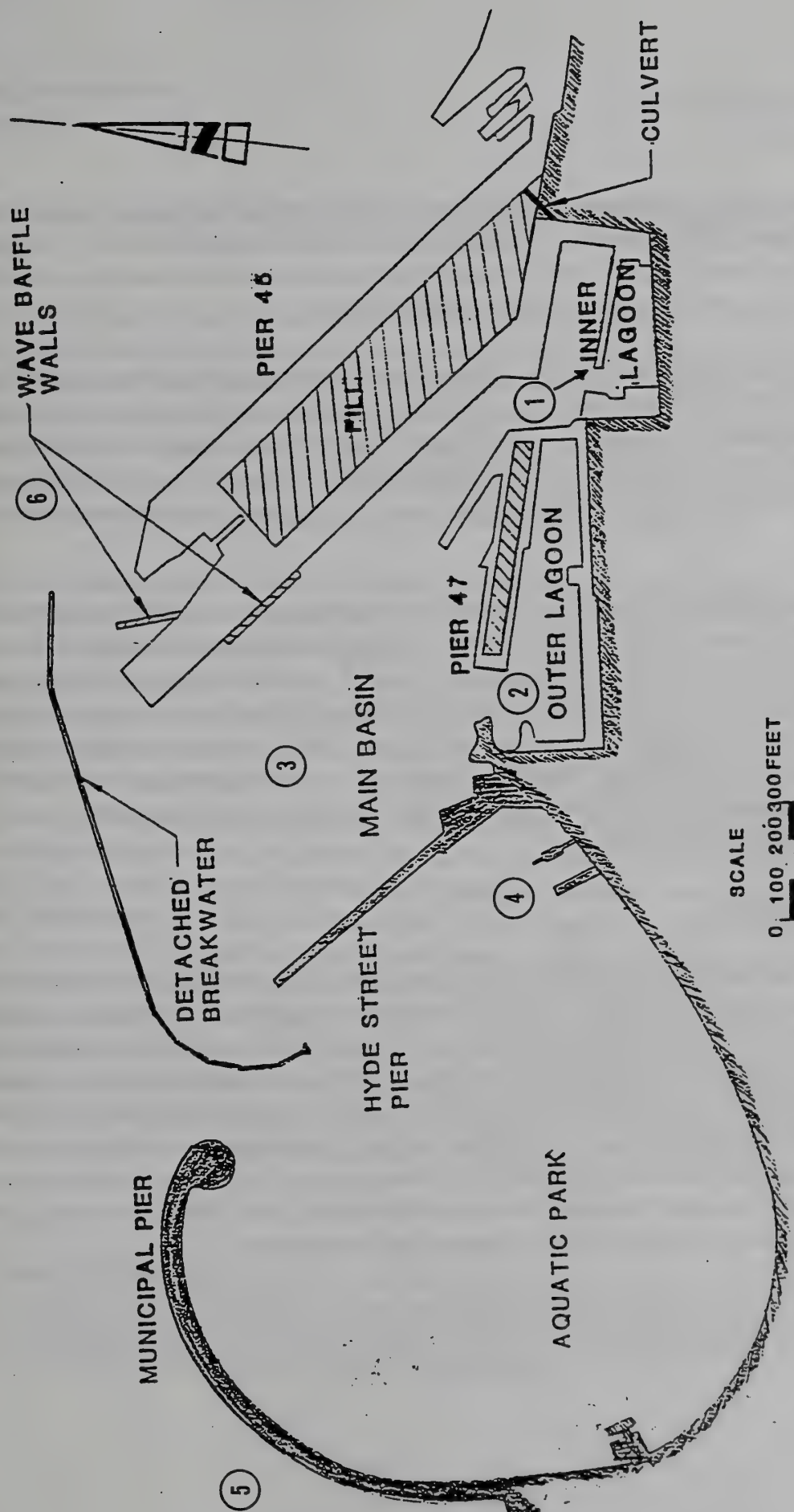
¹¹ Woodward-Clyde Consultants, 1995. Hyde Street Harbor/Pier 45 Water Quality Sampling Plan. April 27, 1995 and Woodward-Clyde Consultants, 1995, Hyde Street Harbor/Pier 45 May 10, 1995 Baseline Water Quality Results. August 21, 1995. Available for review at the Planning Department, 1660 Mission Street, in the project file #93.574E.

for constituents which may be affected by the proposed project and are of potential concern to those involved in water contact recreation, particularly in Aquatic Park; (2) assess water quality in Aquatic Park for constituents which may be affected by the proposed Hyde Street Harbor and Pier 45 improvements; and (3) assess water quality outside of the area of immediate concern for comparison with the project area and the Aquatic Park. The sampling plan also established a protocol for potential future single-event water quality sampling in the Fisherman's Wharf area.

Sampling Procedures

Water quality samples were collected at six stations, as shown on Figure 11. Station 1 is located in the Inner Lagoon at the end of the pier, Station 2 is located in the Outer Lagoon at the existing fuel dock, and Station 3 is in the center of the Outer Harbor (Main Basin); these three stations represent the area where water is potentially affected by the commercial fishing vessels and related activities. Station 4 is located in Aquatic Park lagoon near the swimming buoys in front of the Dolphin Club and South End Rowing Club docks; this station was selected to represent the water most often contacted by swimmers in the lagoon. Station 5, located west of the municipal pier, and Station 6, located at the harbor entrance north of Pier 45, represent an area outside the immediate area of concern and are used to determine the water quality conditions in areas subject to higher Bay flushing than the harbor (including the Inner and Outer Lagoons and the Outer Harbor) and Aquatic Park. The time and date of sampling were selected to coincide with tidal conditions which were predicted to favor accumulation of debris and other materials of concern in the Harbor and transport of these materials from the Harbor to Aquatic Park. Based on water current surveys and hydrodynamic modeling conducted by the U.S. Army Corps of Engineers (COE) before and after the breakwater construction, it appears that during an ebbing tide, the direction of water current flow is from the Outer Harbor (Main Basin) toward Aquatic Park. However, modeling conducted by the COE did not take into consideration the effect of the presence of historical ships docked along the east side of Hyde Street Pier between Fisherman's Wharf and Aquatic Park. Their presence at depth may impede water circulation between the Harbor and Aquatic Park. Higher concentrations of debris and other materials were

Golden Gate-San Francisco Bay Channel



WATER QUALITY SAMPLING LOCATIONS

FIGURE NO. 11

assumed to occur in the Outer Harbor following a period of minimal flushing, during which time these materials may accumulate in the Harbor without being diluted by other waters. Therefore, the time and date of sampling were scheduled to attempt to coincide with neap tides, during the period of ebbing flow when water current velocities were low.

Although locally-generated wind waves could affect water currents from the Harbor to Aquatic Park, wind conditions could not be predicted and sampling was scheduled to occur in the evening and in the morning when winds are typically slight. The wind was calm during the sampling of Stations 1 and 6. A light breeze from the northwest began during sampling at Station 2, became stronger during sampling of Station 3, and continued for the duration of the sampling at Stations 4 and 5.

Water samples were collected approximately six inches below the water surface to represent the portion of the water column that is most often contacted by swimmers as a result of the mixing that occurs during swimming. Surface sampling was not conducted because of this mixing action.

Sample collection was conducted using standard, approved methods, and laboratory analysis were conducted using approved methods for most constituents and special methods for organics to provide low detection limits. Selection of water quality constituents measured was based on potential pollutants associated with Harbor activities, results of previous water quality and sediment testing, and public input.

Sampling Results

Water quality samples collected in the project area in May 1995 were analyzed for conventional parameters, bacterial indicators, nutrients, metals, polynuclear aromatic hydrocarbons, organic tin compounds, petroleum-related hydrocarbons, and organophosphorus pesticides. The results of the water quality sampling data collected on May 10, 1995 are summarized in Table 1, Appendix B, page A.32. The data indicate that the water quality in the project area does not exceed state Basin Plan water quality objectives. Similarly, the data do not exceed the U.S. Environmental Protection Agency water quality standards, with the exception of dissolved copper levels at two of the sampling locations. The quality of the water in the project area is generally within the same range as water quality data from nearby parts of San Francisco Bay

collected in 1993 as part of the Regional Monitoring Program (see Table 1, Appendix B, page A.32).

Measurements of salinity, temperature, and pH indicated similar ranges of values for all six stations. The salinity in the project area ranged from 10 to 14 parts per thousand (ppt), which is comparable to salinity measurements for the Central Bay from the Regional Monitoring Program during March 1993 (about 16 ppt which represents the wet season when freshwater outflow from the Delta is highest). Levels of total suspended solids, turbidity, and biochemical oxygen demand, which could be indicators of potential effects of stormwater runoff, fish processing waste, or tenant washdown of the pier apron, were also within similar ranges at all six stations.

The coliform bacteria measurements are used as indicators of human waste and potential presence of human pathogens or marine mammal waste. The data indicate that the Inner Lagoon, Outer Lagoon and Outer Harbor (Main Basin) had higher concentrations of coliform bacteria compared to Aquatic Park and areas outside of the breakwater. The source of coliform could be due to stormwater or urban runoff, (including runoff from aprons along the fish alley where drains discharge directly to Bay) possible illegal discharges from fishing boats, or unsupervised discharges on weekends, or from marine mammals. However, despite the differences in coliform levels measured between sampling stations, the concentrations measured at all sampling stations except for the Outer Harbor were within the public health criteria for bacteriological standards for water contact recreation; however, compliance criteria for bacteriological standards are based on sampling over a thirty-day period. This means that based on public health criteria, the water quality in the project area, except the Outer Harbor, would be considered acceptable for swimming but additional sampling would be required. The bacteriological standards for public beach or water-contact sports require that sample have a coliform levels less than 1,000 Most Probable Number per 100 milliliter (MPN/100 mL, which is a statistical measure of the number of bacterial colonies) and no single sample shall exceed 10,000 per 100 mL.¹² The maximum coliform concentration measured was 1600 MPN/100 mL in the Outer Harbor, and all other stations were less than 1,000 MPN/100 mL. Comparison of

¹² Title 17, Chapter 5 of the California Code of Regulations, states that the "Bacteriological standards for each public beach or water-contact sports area shall be as follows: Samples of water from each sampling station at a public beach or public water-contact sports area shall have a most probable number of coliform organisms less than 1,000 per 100 ml; provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml, and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml."

historical coliform data in the project area with other coliform data along San Francisco's waterfront is discussed further below.

The only nutrient found in the samples tested was ammonia nitrogen, which could potentially be present in stormwater runoff, fish processing waste and human waste. The concentrations measured at all stations indicate that ammonia levels were less than the Basin Plan objective for the Central San Francisco Bay.

Water samples were analyzed for both total recoverable metals and dissolved metals to enable comparison with current Basin Plan objectives and EPA's proposed interim criteria, respectively. The metals analyzed include arsenic, cadmium, chromium, copper lead, mercury, nickel, selenium, silver and zinc. Arsenic, copper, nickel and zinc were the only metals detected and were present at all sample stations. The concentrations of all of the total recoverable metals were less than the applicable Basin Plan water quality objectives for toxic pollutants for surface waters with salinities greater than 5 parts per thousand. Concentrations of "dissolved metals" in water have been determined by EPA to reflect more accurately the fraction of waterborne metals biologically-available to aquatic organisms compared to "total recoverable metals". Thus, revisions to the federal water quality standards for metals criteria were issued in an interim final rule in May 1995, and California is subject to the revised metals criteria.¹³ The sampling data from May 1995 at the project area indicate that, with the exception of copper, the concentrations of all dissolved metals at all stations were less than the federal saltwater dissolved metals criteria. The dissolved copper data indicated that concentrations exceeded the 2.4 microgram per liter (ug/L or part per billion) criterion at Station 1 (Inner Lagoon) and Station 4 (Aquatic Park), with concentrations measured at 3.2 and 2.8 ug/L, respectively. The saltwater copper criteria of 2.4 ug/L is still being examined by EPA, with an alternate criterion of 3.1 ug/L under consideration.¹⁴

Total petroleum hydrocarbons, either as gasoline or diesel, were not detected at any of the sampling stations, with a laboratory reporting limit of 50 parts per billion. The samples were also

¹³ Federal Register, Volume 60, No. 86, Thursday, May 4, 1995, Rules and Regulations. 40 CFR Part 131.

¹⁴ Federal Register, Volume 60, No. 86, Thursday, May 4, 1995, Rules and Regulations. 40 CFR Part 131.

analyzed for benzene, toluene, ethylbenzene, and xylene, which are major components of petroleum products and could also serve as indicators of contamination from vessel fueling, maintenance activities, or other sources of petroleum products, such as urban runoff. The results show none of these chemicals were detected at a reporting limit of 0.5 parts per billion, with one exception. Toluene was detected in the Outer Harbor (Main Basin) at 0.73 ug/L, which is six orders of magnitude (10^6) less than the water quality objective to protect human health. During sample collection, the field observations noted an organic sheen apparent in the Inner Lagoon (Station 1) and in the vicinity of the Outer Harbor (Station 3), but none was noted at any of the other stations.¹⁵

Compounds of organic tin (monobutyltin, dibutyltin, tributyltin, and tetrabutyltin) were historically used as an anti-fouling agent and used in marine paints for the hulls of boats. They are known to be toxic to aquatic life at low concentrations, about one part per billion. Tributyltin is now banned from use (except by the military). Analysis for these compounds identified presence of tributyltin and tetrabutyltin in the Inner Lagoon (Station 1), but no organic tin compounds were detected at any of the other locations. The concentration of tributyltin measured at Station 1 was 13 nanograms per liter (ng/L or parts per trillion); this value does not exceed any water quality objectives, since none is stated in the Basin Plan, but it is higher than a value of 5 ng/L (30-day average) which, based on technical information, would be considered protective of human health.¹⁶

Polynuclear aromatic hydrocarbons (PAHs) were found in all samples at all locations at concentrations in the range of 5 to 88 ng/L (or parts per trillion). The concentrations were generally similar at all stations for all PAHs measured. PAHs are a class of organic compounds commonly formed as the result of incomplete combustion of organic materials, such as motor oil or automobile exhaust. Natural sources, such as forest fires and volcanoes, also contribute to background concentrations of PAHs in the environment. Some of the reported PAHs have

¹⁵ The sampling method used to collect water was designed to obtain samples most representative of water contacted by swimmers, which was determined to be generally an area of mixing about six inches below the water surface. Obtaining a sample of the surface micro-layer was considered, but it was determined to be less reliable than the selected method because of physical constraints (such as wind speed and water turbulence) associated with quantification of pollutant concentrations in surface films. For additional information, refer to Woodward-Clyde Consultants, Hyde Street Harbor/Pier 45 Water Quality Sampling Plan, April 27, 1995, which is available for review at the Planning Department, 1660 Mission Street, in the project file #93.574E.

¹⁶ California Regional Water Quality Control Board, San Francisco Bay Region, 1995. 1995 Basin Plan Amendments, June 21, 1995.

been identified by the U.S. EPA as carcinogenic (see below under Public Health). The Basin Plan objective for PAHs was not exceeded at any of the sampling station, and the sample results also indicate that PAH concentrations were less than the applicable EPA standards.

Concentrations of all organophosphorus pesticides were below reporting limits for samples at all stations. There are no water quality objectives or standards for this group of compounds. Organophosphorus pesticides are commonly used to control insects or other pests, and there is the potential for these compounds to be present in stormwater runoff or washdown from the pier apron; these compounds could potentially affect the marine ecology.

PUBLIC HEALTH EVALUATION OF EXISTING WATER QUALITY

A risk assessment of the May 10, 1995 sampling results in the project area was prepared and is summarized below.¹⁷ Carcinogenic risks and non-carcinogenic adverse health effects were evaluated for analytical results of samples collected at all sampling stations, with focus on Station 4, Aquatic Park, where swimming occurs. The potential chemicals of concern consisted of the following chemicals: acenaphthene, benzo(b)fluoranthene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene, toluene, arsenic, copper, nickel, and zinc.

Arsenic was the only metal detected that is considered to be a carcinogenic compound by the U.S. EPA. The other three metals (copper, nickel, and zinc) were evaluated as non-carcinogens. The highest concentration of arsenic detected was 2.3 ug/L, which is well below the Drinking Water Standard (or Maximum Contaminant Level) of 50 ug/L. Arsenic was evaluated as both a carcinogen and a non-carcinogen.

Of the chemical compounds typically associated with fuels and gasoline (benzene, toluene, ethylbenzene and xylene, and total petroleum hydrocarbons), only toluene was detected and at only one station. It occurred in the Outer Harbor (Main Basin) at a concentration of less than one part per billion (0.73 ug/L), which is about one hundred times less than the California maximum contaminant level for drinking water of 0.15 mg/L (or 150 ug/L) and about one

¹⁷ Soma Corporation, 1995. Risk Assessment for Hyde Street EIR. September 1995. Available for review at the Planning Department, 1660 Mission Street, in the project file #93.574E.

thousand times less than the federal drinking water standard of 1 mg/L (or 1,000 ug/L). Toluene was evaluated as a non-carcinogen.

Low concentrations of various polynuclear aromatic hydrocarbon compounds (PAHs) were detected above the laboratory reporting limit in samples at all locations, in the concentration range of parts per trillion. Special laboratory methods were used to obtain the lowest detection limits. Of the eight PAHs detected above the laboratory reporting limit, two are classified by the EPA as carcinogenic compounds: benzo(b)fluoranthene and chrysene. In general, however, extensive research on the toxicological effects of individual PAH compounds has not been conducted. There are no available drinking water standards for any of the PAHs detected. The concentrations of PAHs reported by the laboratory appear to be within the range of concentrations that have been reported in potable surface and ground waters in the United States. As stated previously, PAHs are commonly formed as a result of incomplete combustion of organic materials, and sources of PAHs are pervasive in the environment, such as in automobile exhaust or forest fires.

A screening level quantitative risk assessment was conducted to evaluate the potential for adverse health effects due to potential contact with the chemicals detected in project area waters during the May 1995 sampling event. The chemicals evaluated included PAHs, metals (arsenic, copper, nickel, and zinc) and toluene. Both carcinogenic and non-carcinogenic effects of these chemicals were assessed independently. Using the results of the May 1995 sampling event and conservative assumptions regarding exposure to these chemicals while swimming in Aquatic Park, the assessment provides information relevant to the health risks associated with potential exposure to these chemicals in the harbor waters.

The results of the risk assessment indicated that the total carcinogenic risk associated with swimming in Aquatic Park is approximately equivalent to an excess cancer rate of about three cases of cancer in a population of one million. (This can also be interpreted to be a probability of about 3 in one million for an individual to contract cancer.) This estimate of risk is lower than the risk of cancer due to drinking water in San Francisco, which is about two cases of cancer in a population of 100,000 persons. The calculated risk associated with swimming in Aquatic Park is also lower than the "significant risk level" established by the Safe Drinking Water and Toxic

Enforcement Act of 1986 (Prop. 65), which is one excess case of cancer in an exposed population of 100,000 persons.

Results of the evaluation of potential non-carcinogenic adverse health effects indicated an unlikelihood for non-carcinogenic adverse health effects to occur.

MARINE BIOTA EVALUATION OF EXISTING WATER QUALITY

The previous discussion of sampling results from the May 1995 sampling event has generally been with regard to public health implications, which in most cases, provide the basis for the water quality objectives and standards. However, marine biota can also be affected by changes in water quality, and in some cases, marine organisms may be more sensitive to concentrations of some chemicals in the Bay water than humans. MEC Analytical Systems conducted a review of the 1995 sampling results with respect to potential water quality effects on marine biota and specifically those chemicals of most concern to marine organisms,¹⁸ as summarized below.

The chemicals that were sampled and analyzed for in the project area that are of potential concern to marine organisms based on the concentrations measured include copper, tributyltin, benzo(a)anthracene, and chrysene. In general, the measured concentrations of these chemicals would not be expected to be harmful to marine organisms. The potential effects of these chemicals to marine biota are summarized in Table 4, with more detailed explanation included in Appendix B of this report.

¹⁸ MEC Analytical Systems, 1995. Marine Biota Setting and Environmental Consequences of Water Quality, San Francisco Pier 45 Project. March, July and August, 1995.

III. ENVIRONMENTAL SETTING

B. Water Quality

TABLE 4. SUMMARY OF POTENTIAL WATER QUALITY EFFECTS ON MARINE ORGANISMS

<u>Chemical of Concern</u>	<u>Conc. Level May 1995</u>	<u>Sampling Threshold Conc. Location</u>	<u>for Effects</u>	<u>Comments</u>
Copper	3.2 ug/L 2.8 ug/L	Inner Lagoon Aquatic Park	4.8 ug/L	Interim EPA standard is 2.4 ug/L but is expected to be revised; no effects expected.
Tributyltin 13 ng/L		Inner Lagoon	100 ng/L	Acute toxicity at 100 ng/L, but sub-lethal effects noted at 9-20 ng/L and could occur.
Benzo(a) anthracene	<5.42 ng/L	all stations	1-2 million ng/L	Threshold for acute toxicity; no effects expected.
Chrysene 6.8 ng/L		Breakwater	1 million ng/L	Few studies but no effects expected.

Notes: ug/L = microgram per liter or parts per billion; ng/L = nanogram per liter or parts per trillion

Source: MEC Analytical Systems, Inc., 1995.

STATISTICAL EVALUATION OF BACTERIOLOGICAL WATER QUALITY

Monitoring of bacteria in surface water along the San Francisco waterfront has been conducted by the San Francisco Clean Water Program pursuant to its NPDES permit. One of the purposes of the monitoring is to determine if bacteria levels in Aquatic Park are in excess of those considered safe for water contact recreation. Excessive bacterial levels have historically occurred following combined sewage overflow events, when high rainfall amounts cause the storage and sewage treatment capacities to be exceeded and untreated sewage mixed with stormwater is discharged at various overflow points to the Bay. In the past 20 years, there have been ongoing improvements to San Francisco's wastewater treatment and conveyance system which are designed to minimize the occurrence of combined sewage overflow events.

A statistical evaluation of coliform data from Bay water sampling stations in the vicinity of Aquatic Park was conducted by SOMA Corporation using the coliform data collected by the City from September 30, 1991 to October 4, 1992.¹⁹ The purpose of the study was to evaluate if coliform concentrations in the Hyde Street Harbor area west of Pier 45 are statistically correlated with coliform concentrations in the Aquatic Park swimming area. The study compared sampling locations at the foot of Leavenworth Street (in the Outer Lagoon of the project area) and at Fisherman's Wharf near the Pump Station (in the Inner Lagoon of the project area) with sampling locations at the east end of Aquatic Park shoreline, plus two control stations 1-1/2 and 2-1/2 miles west of Aquatic Park. The study included a limited evaluation of the potential influences of rainfall, tidal conditions, and fish landings on coliform concentrations.

The results of the statistical study indicated that the average coliform concentrations in the project area were significantly higher than the average concentration at Aquatic Park. However, based on the available data, no statistically significant correlation of coliform concentrations was identified between those at Aquatic Park and those at either of the two project area stations. The Aquatic Park coliform concentrations did show a statistically significant correlation with concentrations at the two control stations west of Aquatic Park. No significant correlations were

¹⁹ SOMA Corporation, 1995. Statistical Evaluation Aquatic Park Coliform Data, Hyde Street Harbor EIR, San Francisco, California. April 7, 1995. Available for review at the Planning Department, 1660 Mission Street in the project file #93.574E.

identified for ebb or flood periods, nor were there correlations with the size of tidal fluctuations near the time of the sampling event. The amount of rainfall during the previous 24-hour period was significantly correlated with coliform concentrations at Aquatic Park and the control stations but not with concentrations at the project area locations. Fish and crab landings did not significantly correlate with coliform concentrations at Aquatic Park or the nearest project area station, and were inversely correlated with the station closest to Fisherman's Wharf. Based on the results of this study, it appears that bacteriological water quality in the Inner and Outer Lagoon of the project area does not affect the bacteriological water quality in Aquatic Park. In addition, the quantity of daily fish landings during this period does not appear to be related to bacteriological water quality in Aquatic Park.

PREVIOUS WATER QUALITY SAMPLING RESULTS

1989 Bendix Study

Previous water quality sampling in the project area was conducted in 1989 by Bendix for toxic chemicals.²⁰ Subsurface water samples (6 inches below the surface) were collected in four locations: Outer Lagoon, Outer Harbor (Main Basin), and west and east sides of Aquatic Park. Water samples were collected three times, once each in April, May and August. It was assumed that the most extreme variations in water quality would occur after the tide had been moving in a particular direction for the maximum period of time, so most of the samples were taken in the hour prior to the change in tidal currents from incoming to outgoing tides. Samples were analyzed for priority pollutants (metals, volatile and semi-volatile organic compounds, organochlorine pesticides and PCB, organophosphorus pesticides, and chlorinated herbicides) using standard EPA methods.

Several aspects of the 1989 sampling were questioned by the public, particularly the timing of the sample events with respect to tidal and circulation conditions, since it may not have been reflective of water quality conditions which cause transport from the Hyde Street Harbor area to Aquatic Park. Most of the samples were collected one hour before the flood to ebb slack period.

²⁰ Bendix Environmental Research, Inc., 1989. *Fisherman's Wharf Seafood Center Water Quality Report*. Prepared for the Office of Environmental Review. San Francisco Department of City Planning. November 29, 1989.

In addition, there are questions regarding the reporting limits and quality assurance procedures used in the laboratory analyses. Therefore, use of the 1989 sampling information for this EIR is limited.

Comparison of the current sampling results (May 1995) with the 1989 sampling data show some similarities. Of the metals, copper, nickel and zinc were detected during both sampling events in the Outer Lagoon and the Outer Harbor (Main Basin), but the 1989 sampling also detected mercury and silver at these locations, that were not detected in the 1995 sampling. The 1995 sampling event detected arsenic in these areas, while none was detected in 1989. The 1989 sampling analyzed a wider range of metals than the 1995 event, and trace concentrations of antimony, barium, thallium, and vanadium were also detected in 1989 but were not analyzed for in 1995. It should be noted that analytical methods and reporting limits were not comparable between the two studies.

The 1989 sampling event did not indicate any volatile organic compounds above reporting limits, including benzene and toluene. The 1995 sampling event included the analysis of only benzene and toluene in this class of compounds, and similar to the 1989 data, no benzene was detected above reporting limits. However, the 1995 data did indicate a detection of toluene in the Outer Harbor. Polychlorinated biphenyls and organochlorine pesticides were not detected above reporting limits in the 1989 data, and they were not sampled or analyzed for in the 1995 sampling event because of their previous absence and lack of correlation between these chemicals and fishing activities. Organophosphorus pesticides were analyzed at both sampling events, and two compounds were detected in May 1989 in the Outer Harbor (demeton at 29.6 ug/L and disulfoton at 13.8 ug/L) but none were detected at any location in the May 1995 sampling event. Phthalates were detected in the 1989 sampling event but were not included in the 1995 sampling because of the widespread occurrence of these common components of plastics and the low concentrations encountered in the 1989 study. No polynuclear aromatic hydrocarbons (PAHs) were detected above reporting limits in the 1989 samples, but as discussed above, some PAHs were detected at low concentrations at all locations in the 1995 samples. Results of the May 1995 sampling event appear to corroborate much of the data from the 1989 sampling event in terms of the types of chemicals present in the harbor waters, but the

more accurate sampling and analytical methods used in 1995 provide a more accurate (and current) indication of water quality conditions in the project area.

1994 Port Stormwater Sampling

Sampling was conducted by the Port of San Francisco on January 24, 1994 as part of the wet weather water quality data associated with its stormwater management protection program.²¹ Samples were collected along the waterfront, including one station at Pier 45 in the Fisherman's Wharf area, and were analyzed for metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium and zinc), specific conductance, pH, suspended solids, grease and oil, and ammonia. The results are generally consistent with the May 1995 sampling data, although the analytical reporting limits were much higher, particularly for the metals, and low concentrations of these chemicals could not be detected. Therefore, the results of the two sampling events cannot be directly compared.

Other Water Quality Data

As part of a site investigation/characterization report in 1990 for the former Mobil Oil Bulk Plant on Jefferson Street, Bay water in the project area was collected and analyzed for petroleum hydrocarbons.²² Analysis of the water samples collected from the Bay at two locations revealed no detectable concentrations of total petroleum hydrocarbons as gasoline, or any benzene, toluene, ethylbenzene, or xylene. The study had indicated that there are potential sources of petroleum hydrocarbon constituents in the soil and groundwater landward of the project site, but the seawall appeared to be an effective hydrogeologic barrier, preventing migration of pollutants to the Bay. This result is consistent with the 1995 sampling results for the same constituents in the Inner and Outer Lagoon stations, the stations closest to land.

²¹ Port of San Francisco, 1994. Bay Receiving Waters Wet Weather Water Quality Data, Table 1. Collected January 24, 1994.

²² Alton Geoscience, Inc., 1990. Site Investigation/Characterization Report at Former Mobil Oil Bulk Plant, 440 Jefferson Street, San Francisco, California. September 20, 1990. Available for review at the Department of Public Works, Bureau of Construction Management, 1680 Mission Street, San Francisco.

III. ENVIRONMENTAL SETTING

B. Water Quality

In 1983, the U.S. Army Corps of Engineers conducted a water quality survey in the Inner and Outer Lagoons, in the Outer Harbor, and offshore prior to construction of the breakwater, but data are insufficient to compare with 1995 sampling results.

C. MARINE BIOLOGY

San Francisco Bay is segmented into the North Bay (Suisun and San Pablo Bays), Central Bay and South Bay, all which have characteristic aquatic conditions. The Central Bay includes waters bounded by the Golden Gate Bridge to the east, San Pablo Bay to the north, and is characterized by oceanic water conditions. This section describes the biota in the Central Bay that may occur at times within the project site. Plankton form the basis of the food chain. Intertidal, benthic, and fish species reflect the marine influence of the Golden Gate. Birds and mammals that utilize the Central Bay area are discussed.

PLANKTON

Plankton are organisms that live in the water column and are carried passively with water currents. Phytoplankton are photosynthetic organisms that convert inorganic nutrients into organic material and are important because of their role as primary producers. Zooplankton are nonphotosynthetic organisms that consume other organisms or organic material. The zooplankton component includes forms that are planktonic throughout their life cycle as well as eggs and larval forms of many invertebrates and fish (fish eggs and larvae often are referred to as ichthyoplankton).

Population sizes and distribution of planktonic organisms fluctuate with season, availability of light, nutrients, temperature, and other environmental parameters. Hence, the distribution and abundance of the plankton community are patchy and extremely dynamic. Generally, diatoms (phytoplankton) bloom in spring to early summer with minor peaks in the fall. A slight reduction in phytoplankton abundance occurs in middle to late summer, when dinoflagellates are dominant. Because zooplankton forage on phytoplankton, high and low zooplankton productivity coincides with phytoplankton cycles, with production in spring and early summer.

Shallow-water diatoms from adjacent coastal waters are the dominant phytoplankton in San Francisco Bay in the spring; dinoflagellates and cryptomonads are numerous at other times of the year.

Calanoid copepods are abundant zooplankters throughout most of the Bay. Copepods are the

primary food for many small fish, including young striped bass.¹ Zooplankton that are commonly collected in the Central Bay include the shrimp *Nematoscelis difficilis*, *Thysanoessa gregaria*, and *Nyctiphanes simplex*, and larvae of the ghost shrimp (*Neotrypaea californiensis*).²

INTERTIDAL

Intertidal fauna are subject to environmental stress due to fluctuating temperatures and desiccation. Tidal exposure is an important factor in determining the distribution of intertidal biota. It has long been observed that animals inhabit different vertical zones of the shore according to relative lengths of exposure to air and water.

Intertidal habitat is found on the breakwater and wharf pilings near the project site. The hard substrate of the breakwater provides substantial surface area for the attachment of algae and invertebrates, which, in turn, support a diverse community of organisms including fish and birds. Pilings also support a community of hard substrate biota. Common intertidal animals in the Central Bay include barnacles, crabs, and mussels.

BENTHOS

Benthic invertebrates include infauna, which live in bottom sediments, and epibenthic macrofauna, which are larger, motile organisms that live on the sediment surface. The infauna usually is dominated, in both species diversity and abundance, by annelid worms. Other common infaunal groups include crustaceans, molluscs, and echinoderms. Organisms associated with this habitat are an important element of the marine food web.

The waters in the Central Bay are relatively deep and saline, and strong tidal currents create a dynamic bottom as sand waves reverse direction on each tide. The benthic community in the Central Bay reflects this marine influence and is composed largely of species that are found in

¹ EPA/Environmental Protection Agency. 1991 *Status and Trends Report on Aquatic Resources of the San Francisco Estuary*. San Francisco Estuary Project. Prepared under EPA Cooperative Agreement by the U.S. Fish and Wildlife Service.

² CDFG/California Department of Fish and Game. 1987. *Longterm Trends in Zooplankton Distribution and Abundance in the Sacramento-San Joaquin Estuary*. Exhibit No. 28 to California Water Resources Control Board, 1987 Water Quality/Water Rights Proceeding on the San Francisco Bay/Sacramento-San Joaquin Delta, Sacramento. CA. 88pp.

sediments along the coast.^{3, 4, 5} In a study of soft bottom benthos in San Francisco Bay, the average abundance of infauna in the Central Bay (east of Yerba Buena) was 472 animals per 0.1 square meter.⁶ A total of 99 different taxa were found. The most abundant species were the crustacean amphipod *Ampelisca abdita*, and the annelid polychaete *Asychis elongata* and the oligochaete *Tubificoides* spp.

The benthic community responds strongly to both seasonal and year to year changes in physical parameters. Total weight of molluscs may be greater in winter compared to summer, while annelids, crustaceans, and other phyla often have higher values in summer.^{7, 8} The strong water mixing within the Bay aids dispersal of larvae, juveniles, and adults of small species and allows rapid colonization of available substrate.⁹

Relatively few species of epibenthic macroinvertebrates are found in San Francisco Bay. The most abundant are crustaceans such as bay shrimp, Dungeness crab, and other crabs. The native Dungeness crab, *Cancer magister*, was once commercially harvested from the Bay.

³ Liu, D.H.W., K.D. Martin, and C.R. Norwood. 1975. *San Francisco Bay Benthic Community Study--Technical Evaluation*. U.S. Army Corps of Engineers dredge disposal study, San Francisco Bay and estuary, Appendix D. San Francisco. 244pp.

⁴ Nichols, F.H. 1979. Natural and Anthropogenic Influences on Benthic Community Structure in San Francisco Bay. In: *San Francisco Bay: The Urbanized Estuary*. T.J. Conomos (ed.). Pacific Division, American Association for the Advancement of Science, San Francisco, CA.

⁵ Nichols, F.H., and M.M. Pamatmat. 1988. The Ecology of the Soft-bottom Benthos of San Francisco Bay: A Community Profile. *Biol. Rep.* 85(7.19). U.S. Fish and Wildlife Service, Washington, DC.

⁶ MEC/MEC Analytical Systems, Inc. 1987. *Analysis of Infaunal Community Structure from Four Sites in the San Francisco Bay Region*. Prepared for Pacific Office, Coastal and Estuarine Assessment Branch Ocean Assessments Division, National Ocean and Service, U.S. NOAA.

⁷ Nichols, F.H., and M.M. Pamatmat. 1988. The Ecology of the Soft-bottom Benthos of San Francisco Bay: A Community Profile. *Biol. Rep.* 85(7.19). U.S. Fish and Wildlife Service, Washington, DC.

⁸ EPA/Environmental Protection Agency. 1991 *Status and Trends Report on Wetlands and Related Habitats in San Francisco Bay*. San Francisco Estuary Project. Prepared under EPA Cooperative Agreement by the U.S. Fish and Wildlife Service.

⁹ Nichols, F.H., and M.M. Pamatmat. 1988. The Ecology of the Soft-bottom Benthos of San Francisco Bay: A Community Profile. *Biol. Rep.* 85(7.19). U.S. Fish and Wildlife Service, Washington, DC.

Today, however, the importance of the Bay to this species lies in its use as a nursery area.¹⁰ The mouth of San Francisco Bay is a major settling area, and crabs enter the Bay as juveniles.¹¹ Juvenile crabs remain in the Bay until August or September of the following year.¹²

Native bay shrimp, including California bay shrimp (*Crangon franciscorum*), blacktail bay shrimp (*C. nigricauda*), blackspotted bay shrimp (*C. nigromaculata*), northern bay shrimp (*C. alaskensis*), and ghost shrimp (*Neotrypaea californiensis*), are collected for use as bait for commercial fisheries.¹³ In a study of the epifaunal invertebrates at Presidio Shoal, which lies between the project site and the Golden Gate Bridge, the most abundant species was the northern bay shrimp.¹⁴

FISH

With primarily deep water habitats, the Central Bay has a rich fish assemblage reflective of its direct connection with the Pacific Ocean. Marine fish species dominate the southern portion, whereas estuarine species are characteristic of the northern portion due to the influence of freshwater input from San Pablo Bay.

Commercial and recreational fish species frequently captured from the Central Bay are listed in Table 5. Dominant species include northern anchovy, English sole, shiner surfperch, white

¹⁰ Tasto, R.N. 1983. Juvenile Dungeness Crab in the San Francisco Bay Area. In *Life History, Environment and Mariculture Studies of the Dungeness Crab, Cancer magister, with Emphasis on the Central California Fishery Resource*. P.W. Wild and R.N. Tasto (eds.). California Department of Fish and Game. *Fish Bulletin No. 172*:135-154.

¹¹ Hatfield, S.E. 1983. Distribution of Zooplankton in Association with Dungeness Crab (*Cancer magister*) Larvae in California. In *Life History, Environment and Mariculture Studies of the Dungeness Crab, Cancer magister, with Emphasis on the Central California Fishery Resource*. P.W. Wild and R.N. Tasto (eds). California Department of Fish and Game, Sacramento, CA *Fish Bulletin No. 172*.

¹² EPA/Environmental Protection Agency. 1991 *Status and Trends Report on Aquatic Resources of the San Francisco Estuary*. San Francisco Estuary Project. Prepared under EPA Cooperative Agreement by the U.S. Fish and Wildlife Service.

¹³ CDFG/California Department of Fish and Game. 1980. *Atlas of California Coastal Marine Resources*. State of California Resources Agency, Department of Fish and Game.

¹⁴ MEC/MEC Analytical Systems, Inc. 1993. *Special Studies for Sand Mining Discharges of the Tidewater Sand and Gravel Company*. Prepared for Tidewater Sand and Gravel Company. November 1993.

TABLE 5 FISH SPECIES FREQUENTLY CAPTURED FROM THE CENTRAL BAY

American Shad (*Alosa sapidissima*)
Pacific Herring (*Clupea harengus pallasii*)
Northern anchovy (*Engraulis mordax*)
Longfin smelt (*Spirinchus thaleichthys*)
Chinook salmon (*Oncorhynchus tshawytscha*)
Plainfin midshipman (*Porichthys nototus*)
Jacksmelt (*Atherinopsis californiensis*)
Pacific staghorn sculpin (*Leptocottus armatus*)
White croaker (*Genyonemus lineatus*)
Shiner surfperch (*Cymatogaster aggregata*)
Bay goby (*Lepidogobius lepidus*)
Pacific pompano (*Peprilus simillimus*)
Speckled sanddab (*Citharichthys stigmaeus*)
Starry flounder (*Platichthys stellatus*)
English sole (*Parophrys vetulus*)

Source: EPA, 1991. Status and Trends Report on Aquatic Resources of the San Francisco Estuary. San Francisco Estuary Project.

croaker, speckled sanddab, jacksmelt, Pacific herring, and longfin smelt, with seasonal incursions of bay goby and plainfin midshipman.¹⁵ Starry flounder are characteristic of shallow waters.¹⁶

Marine fish in San Francisco Bay can be divided into species that are seasonally present and those that maintain at least part of their population in the Bay year round. Northern anchovy are

¹⁵ EPA/Environmental Protection Agency. 1991 *Status and Trends Report on Aquatic Resources of the San Francisco Estuary*. San Francisco Estuary Project. Prepared under EPA Cooperative Agreement by the U.S. Fish and Wildlife Service.

¹⁶ Ibid.

widely distributed and account for 80% of the fish in the Bay.¹⁷ Eggs and larvae of this species are present in the Bay, indicating that all life stages utilize the Bay, but none stay year round. Likewise, Pacific herring, the second most abundant species, enter the Bay primarily for spawning, with adults present in high abundance only seasonally. Pacific herring begin to immigrate into the Bay in November, with spawning occurring from December to February.¹⁸

Other marine species that utilize the Bay as a nursery ground include starry flounder, English sole, speckled sanddab, and white croaker. Spawning occurs outside the Bay, then eggs and larvae enter the Bay via density-driven bottom currents and tidal forces.¹⁹ Species that rely on these bottom currents for transport can be adversely affected when river outflow is low.²⁰

Anadromous species that ascend from sea to rivers to spawn must pass through the Central Bay on their travel to the Delta, but only chinook salmon occur regularly. This species travels through the deeper waters of Central Bay (outside of the project area) primarily from April to June.²¹

BIRDS

Species of birds that are characteristic of open water habitats in San Francisco Bay are listed in Table 6. The most abundant species are Clark's and Western grebes, Western gull, and American coot.²² Other common species include glaucous-winged gull, red-throated and common loons, horned grebe, California brown pelican, double-crested cormorant, and surf scoter. San Francisco Bay provides important habitats year round for over-wintering, breeding,

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Pearson, D.E. 1989. Survey of Fishes and Water Properties of South San Francisco Bay, California, 1973-82. NOAA Technical Report. *National Marine Fisheries Service* No. 78.

²⁰ Armor, C., and P.L. Herrgesell. 1985. Distribution and Abundance of Fishes in the San Francisco Bay Estuary Between 1980-1982. *Hydrobiologia* 129: 211-227.

²¹ EPA/Environmental Protection Agency. 1991 *Status and Trends Report on Aquatic Resources of the San Francisco Estuary*. San Francisco Estuary Project. Prepared under EPA Cooperative Agreement by the U.S. Fish and Wildlife Service.

²² Ibid.

TABLE 6 OPEN WATER-HABITAT BIRDS OF SAN FRANCISCO BAY

Red - throated loon (<i>Gavia stellata</i>)
Common loon (<i>Gavia immer</i>)
Horned grebe (<i>Podiceps auritus</i>)
Western grebe (<i>Aechmophorus occidentalis</i>)
Clark's grebe (<i>Aechmophorus clarkii</i>)
California brown pelican (<i>Pelecanus occidentalis californicus</i>)
Double - crested cormorant (<i>Phalacrocorax auritus</i>)
Brandt's cormorant (<i>Phalacrocorax penicillatus</i>)
Pelagic cormorant (<i>Phalacrocorax pelagicus</i>)
Scaupp spp. (<i>Aythya</i> spp).
Surf scoter (<i>Melanitta perspicillata</i>)
American coot (<i>Fulica americana</i>)
Western gull (<i>Larus occidentalis</i>)
Glaucous - winged gull (<i>Larus glaucescens</i>)
Caspian tern (<i>Sterna caspia</i>)
Forster's tern (<i>Sterna forsteri</i>)

Source: EPA, 1991. Status and Trends Report on Wildlife of the San Francisco Estuary. San Francisco Estuary Project.

and migratory species. Greatest species diversity occurs during fall and winter, and highest abundances coincide with the spring and fall migrations.

Preferred habitat utilization in the Bay is both species dependent and seasonal. Wintering red-throated and common loons utilize deep, open waters, particularly in the Central Bay. Western and Clark's grebes are abundant wintering species that also use open bay waters with preference to narrows or islands in the Central Bay. Western gulls and most other gulls are abundant year round residents, foraging opportunistically throughout the Bay. Terns seasonally utilize open bay areas, breakwaters, and marshes. Scaup and scoters are the principal waterfowl in open water areas of the Central Bay. The American coot is an abundant species that is found throughout the Bay but has preference for open water and marshes. California

brown pelicans are characteristic of rocky intertidal habitats of the Central Bay.²³

Abundant nesting species in the Central Bay are the Western gull and double-crested cormorant. Key breeding areas for these species are located at Richmond-San Rafael Bridge, San Francisco-Oakland Bay Bridge, and Alcatraz Island. Although the California brown pelican does not nest in the area, San Francisco Bay is used by this species for foraging and roosting. Roosting locations in the Central Bay include Angel Island and Hunter's Point.²⁴

MAMMALS

Commonly occurring mammals in San Francisco Bay include the harbor seal (*Phoca vitulina richardii*) and California sea lion (*Zalophus californianus*), with estimated populations of 700 and 600 animals, respectively.²⁵ The Stellar sea lion (*Eumetopias jubatus*) has been sighted near Pier 39.²⁶

Primary haulout sites for the harbor seal are located at Mowry Slough, Greco Island, Yerba Buena Island, Castro Rocks near the Richmond-San Rafael Bridge, and Corte Madera Ecological Reserve. Mowry Slough and Greco Island also serve as breeding grounds for this species. A principal haulout for the California sea lion is at the Pier 39 marina. This species does not breed in the Bay and is rarely observed in the area from May through July. Peak abundances of the California sea lion at Pier 39 occur in January and February,²⁷ coinciding with the Pacific herring spawn.²⁸ Sea lions rest during the day and forage in open waters of the Central Bay

²³ EPA/Environmental Protection Agency. 1991 *Status and Trends Report on Wildlife of the San Francisco Estuary*. San Francisco Estuary Project. Prepared under EPA Cooperative Agreement by the U.S. Fish and Wildlife Service.

²⁴ EPA/Environmental Protection Agency. 1991 *Status and Trends Report on Aquatic Resources of the San Francisco Estuary*. San Francisco Estuary Project. Prepared under EPA Cooperative Agreement by the U.S. Fish and Wildlife Service.

²⁵ EPA/Environmental Protection Agency. 1991 *Status and Trends Report on Aquatic Resources of the San Francisco Estuary*. San Francisco Estuary Project. Prepared under EPA Cooperative Agreement by the U.S. Fish and Wildlife Service.

²⁶ Feldman, H. 1994. *Monitoring Report: Seaplane Effects on Sea Lions at Pier 39*. Conducted by the Marine Mammal Center, Marin Headlands, Golden Gate National Recreation Area, Sausalito, CA. November 1994.

²⁷ Ibid.

²⁸ CSLC/California State Lands Commission. 1994. *California Comprehensive Offshore Resource Study*. Volume I. 435pp.

and the ocean at night.²⁹ Both the harbor seal and California sea lion have been observed in the project area but primarily haul out at Pier 39 floating docks.

SENSITIVE SPECIES

Common Loon

The common loon (*Gavia immer*) is a California Species of Special Concern. This species forages on fish and, to a lesser degree, aquatic invertebrates. Prey are pursued and swallowed under water.³⁰ Common loons utilize the deep, open waters of the Central Bay.

Double-crested Cormorant

The double-crested cormorant (*Phalacrocorax auritus*) also is a California Species of Special Concern. This species forages in open waters for a variety of prey including flounder, smelt, surfperch, and shrimp.³¹ The cormorant nests in the Central Bay; the nest site closest to the project area is Alcatraz Island. The California Department of Fish & Game recognizes several healthy colonies of Cormorants in the Bay Area. The species typically perches on man-made structures that are inaccessible to humans, such as bridges and transmission line towers. Cormorants have been observed perching (resting) on the breakwater in the project area.

California Brown Pelican

The California brown pelican (*Pelecanus occidentalis californicus*) is a federal and state-listed endangered species. Brown pelicans roost on land at night and forage in shallow waters during the day. Anchovies are the preferred food of the brown pelican.³² Roosting locations in the Central Bay include Angel Island. The California Brown pelican breeds in nesting colonies on islands from the Channel Islands off the coast of Southern California southward to Mexico. Breeding typically occurs between December and July. Nesting colonies are extremely sensitive

²⁹ Feldman, H. 1994. *Monitoring Report: Seaplane Effects on Sea Lions at Pier 39*. Conducted by the Marine Mammal Center, Marin Headlands, Golden Gate National Recreation Area, Sausalito, CA. November 1994.

³⁰ Ehrlich, P.R., D.S. Dobbin, and D. Wheye. 1988. *The Birder's Handbook: A Field Guide to the Natural History of North American Birds*.

³¹ MMS/Minerals Management Service. 1984. *Final Environmental Impact Statement: Volume I, Proposed 1983 Outer Continental Shelf Oil and Gas Lease Offering Santa Barbara Channel*. OCS Sale No. 80. December 1983.

³² Jaques, D.L., and D.W. Anderson. 1987. *Final Report. Conservation Implications of Habitat Use and Behavior of Wintering Brown Pelicans Pelecanus occidentalis californicus*. Submitted to the Public Service Research and Dissemination Program, University of California, Davis.

to human disturbance. An unattended egg is vulnerable to heat stress and can die within 30 minutes if the adult is flushed from the nest by the presence of humans or their pets.

During the non-breeding periods, individuals and groups of pelicans disperse along the west coast from British Columbia, Canada to Central America. Non-breeding pelicans may congregate in groups at specific locations called roosting sites. Pelican roosting sites have been identified in several locations in the San Francisco Bay and are typically located on islands or breakwater structures which are not accessible to humans. An individual pelican is likely to perch on pilings, piers or floating structures. This perching activity by an individual or small group of pelicans is not considered roosting. (source: Wilcox, Carl, Environmental Services Supervisor, California Department of Fish & Game, Region III, personal communications with Patricia Mosley, Biologist, Woodward-Clyde Consultants, July 5, 1996.) California brown pelicans have been observed perching on pilings adjacent to the existing fueling station in the Main Basin of the Hyde Street Harbor and this activity has been recorded on video film dated January 6, 1996 (Judy Irving and Christopher Beaver).

Stellar Sea Lion

The Stellar sea lion (*Eumetopias jubatus*) is listed as federally threatened. Stellar sea lion breeding occurs from mid-May to the end of June at locations including the Farallon Islands and Ano Nuevo Island.³³ This species has been sighted intermittently at Pier 39.³⁴

³³ Biosystems Analysis, Inc. 1994. *Life on the Edge: A Guide to California's Endangered Natural Resources*. Volume I. Wildlife. C.G. Thelander (ed.). 550pp.

³⁴ Feldman, H. 1994. *Monitoring Report: Seaplane Effects on Sea Lions at Pier 39*. Conducted by the Marine Mammal Center, Marin Headlands, Golden Gate National Recreation Area, Sausalito, CA. November 1994.

D. PUBLIC UTILITIES

SEWER AND STORMWATER SERVICES

The combined sewer system in the City carries both municipal and industrial wastewater and intercepted storm runoff in the same sewer pipes. On the east side of the City, the City owns and operates two wastewater pollution control plants along the Bay, which discharge the treated effluent to the Bay.

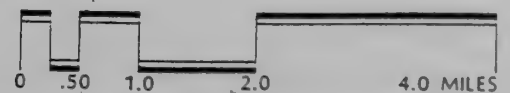
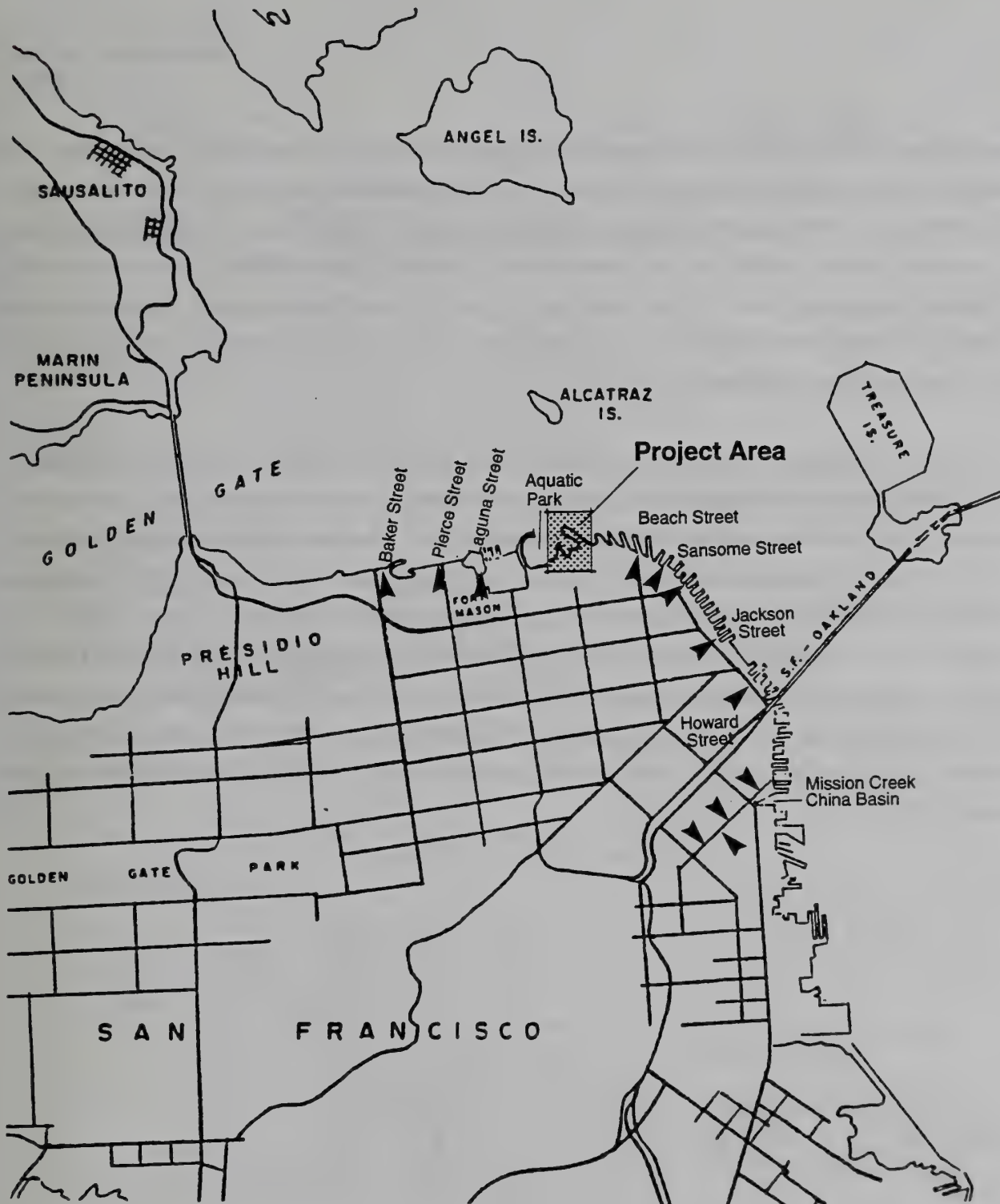
The Southeast Water Pollution Control Plant (SEWPCP) is located on Jerrold Avenue between Quint Street and Phelps Street. Secondary-treated dry weather effluent from SEWPCP is discharged to the Bay through the Pier 80 Outfall, located east of the Army Street Pier. The SEWPCP treats about 85 million gallons per day (mgd) of sewage during dry weather, including all flows from the waterfront and the project area.

The North Point Water Pollution Control Plant (NPWPCP) is located on Bay and Kearney Streets at the Embarcadero. It is a primary treatment facility, with a capacity of 150 mgd, and only operates during wet weather. Treated effluent is discharged through two outfalls located under Pier 33 and two outfalls under Pier 45. Stormwater from the project area is treated at NPWPCP during heavy rains when treatment capacity of the SEWPCP (about 210 mgd) is exceeded.

Hyde Street Harbor and Pier 45 are located within the Northshore Consolidation drainage basin, which includes seven wet weather overflow points to the Bay. During especially heavy rains, untreated wet weather runoff in excess of the treatment plant capacity discharges to the Bay at the following locations: to the west of the proposed project are outfalls located at Baker Street, Pierce Street, Laguna Street, and Beach Street; to the east of the proposed project are outfalls located at Sansome Street and Jackson Street. The NPDES¹ Permit issued by the Regional Water Quality Control Board allows an average of four overflows to the Bay per year at each of these locations.² The locations are shown on Figure 12.

¹ National Pollutant Discharge Elimination System Permit, which is issued by the Regional Water Quality Control Board to facilities which discharge effluent to public waters. The permit specifies allowable limits for pollutants in the effluent.

² Regional Water Quality Control Board Order Number 95-039, NPDES Permit Number CA0038610, Reissuing Waste Discharge Requirements for City and County of San Francisco, Bayside Wet Weather Facilities, February 15, 1995.



**STORM WATER
OVERFLOW LOCATIONS**

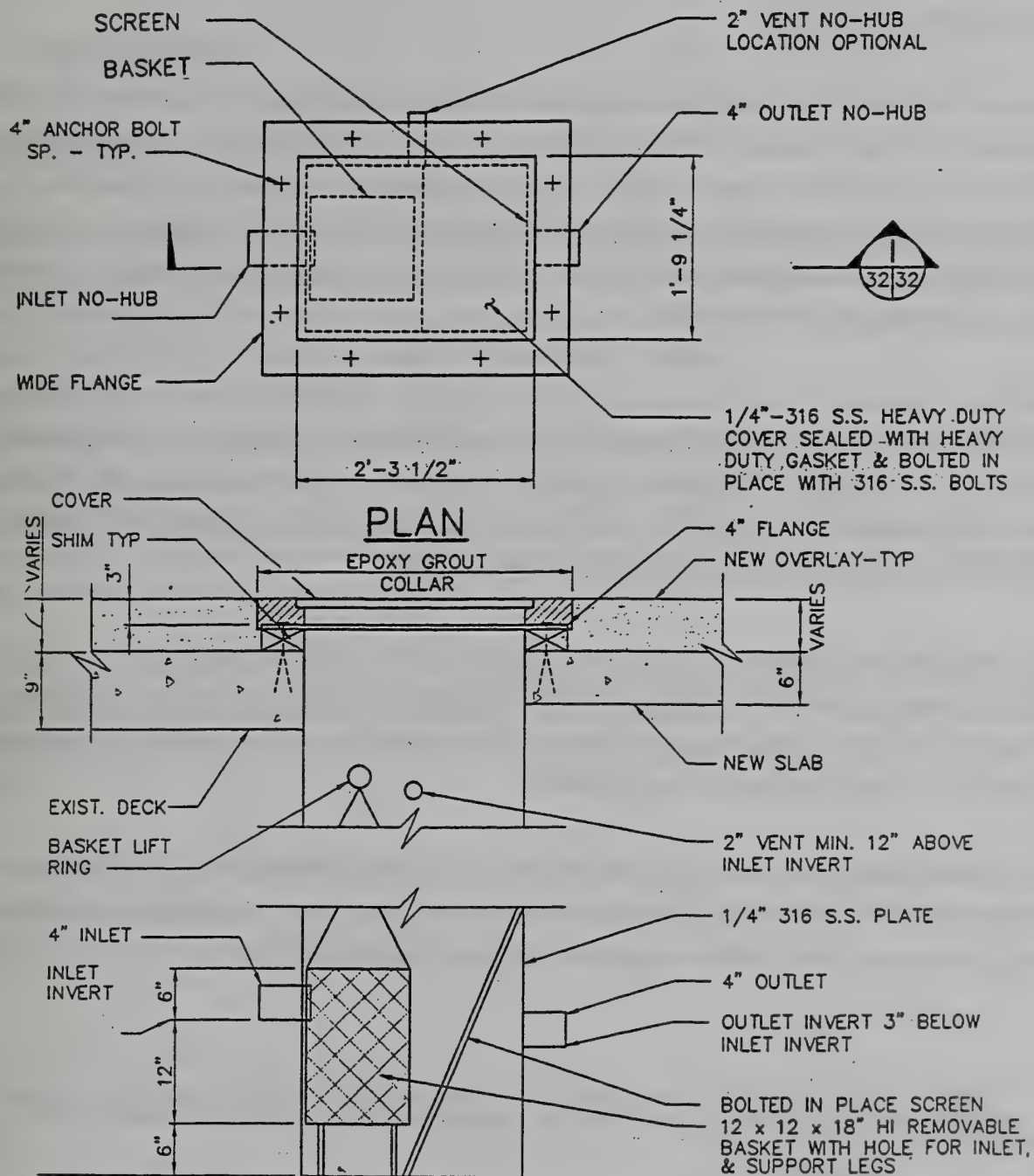
FIGURE NO. 12

Sewer mains in the proposed project area are typically three-foot by five-foot oval brick mains over 100 years old. Other materials used to construct the mains include glazed clay, vitrified clay, reinforced concrete and polyethylene. Some sections of pipe have been retrofitted with plastic liners. The existing system has no apparent problems handling the dry weather flows. Jefferson Street is served by a modified 51-inch reinforced concrete pipe sewer line that tapers to a 45-inch reinforced concrete pipe.³ The piers have no stormwater drainage connections to the City sewer system. Several locations along Fish Alley have drains in the paved pier that drain directly to the Bay.

Following the 1989 Loma Prieta earthquake, rehabilitation work was required on existing utility systems. Under the FEMA grant to complete earthquake repairs in the area, some improvements to the infrastructure were completed in 1994 to bring the Pier into code compliance. These improvements included: installation of a six-inch sewer force main along Pier 45 to the 51-inch sewer line under Jefferson Street; installation of drains, floor sinks and solids separators in each lease area for the fish handling in Sheds B and D; and installation of two 4,000-gallon oil/water separators for stormwater runoff located under the paved surface on Pier 45 between Sheds A and C. Runoff from the sheds roofs and parking area is directed to the valley, then to the oil/water separator. From the separator, the water flows to the Bay. The solids interceptor and separator sinks are connected to a sump, which connects to the six-inch sewer line along the pier,⁴ as shown in Figure 13.

³ Communication with Henry Anderson, City and County of San Francisco, Department of Public Works, February 15, 1990.

⁴ Personal interview with Ed Bubnis, Chief Building Inspector, Port of San Francisco, June 12, 1995.



SOLIDS INTERCEPTOR AND SEPARATOR

SINKS IN SHEDS B AND D

FIGURE NO. 13

WATER SUPPLY SERVICES

The San Francisco Water Department stores and distributes potable water for domestic use and fire protection within San Francisco and also sells water to public and private water companies serving San Mateo, Alameda and Santa Clara counties. Water for residential and business uses in San Francisco is distributed through low-pressure mains from eleven operating City reservoirs.⁵ Water service within the proposed project area is supplied from the 140.9 million gallon University Mound Reservoir, on University and Bacon Streets near McLaren Park.⁶

The Water Department's capital improvement program calls for improving the water supply system on a continuous basis. Older mains with leakage problems are targeted for replacement. The repair schedule is decided at the beginning of the fiscal year and often coincides with street resurfacing plans. There is no currently scheduled work in the area of the proposed project, although there has been some water supply system main replacement in the vicinity over the last few years.⁷

The water distribution system in the City generally withstood the Loma Prieta earthquake of 1989. Main pipeline breaks occurred in the Marina district due to liquefaction of Bay mud and of uncompacted fills dating from the 1930's. Even though much of the Fisherman's Wharf area is also on fill, main pipeline breaks did not occur there during the earthquake.⁸

The proposed project area is served by an 8-inch water main along Jefferson Street, which tapers to a six-inch main west of Hyde Street. There is a six-inch main along Taylor Street to Pier 45 and a four-inch water main in Jones Alley, which tapers to a two-inch water main along Pier 47.⁹

⁵ Personal interview with Joe Pelayo, Jr., Section Head, San Francisco Water Department, Distribution Division, Engineering, June 7, 1995.

⁶ Personal interview with Bhulabhai Desai, Civil Engineer, San Francisco Water Department, Distribution Division, Engineering, June 7, 1995.

⁷ Personal interview with Joe Pelayo, Jr., Section Head, San Francisco Water Department, Distribution Division, Engineering, June 7, 1995.

⁸ Personal interview with Steven I. Van Dyke, Superintendent, San Francisco Fire Department, Bureau of Engineering and Water Supply, June 16, 1995.

⁹ Personal interview with Bhulabhai Desai, Civil Engineer, San Francisco Water Department, Distribution Division, Engineering, June 7, 1995.

E. PUBLIC SERVICES

POLICE SERVICES

The San Francisco Police Department (SFPD) provides police protection to the City and all waters within the City's jurisdiction. This would include waters such as the Harbor at Pier 45. The U.S. Coast Guard has criminal jurisdiction only over crimes that occur beyond the breakwater. Crimes that occur on moored vessels or boats that are underway are outside of Coast Guard jurisdiction.¹

SFPD patrol functions are performed out of ten district stations. The proposed project is within the jurisdiction of the Central District, which extends from Geary and Larkin Streets, north on Larkin to Aquatic Park, east and south along the Bay to Market Street, and Market Street to the intersection of Geary and Larkin Streets.² The densely populated neighborhoods and the daily influx of business people and tourists create congestion and a high demand for police services in the District.³

Central Station is located on the ground floor of a five-story public parking garage at 766 Vallejo Street between Stockton and Powell Streets, about one mile from the project area. A 1987 study recommended Central Station be relocated, but due to citizen demands and budget constraints, that it not likely to happen.⁴

Since May 1994, there has been police office space at the Wharfinger's Office near the Inner Harbor for an officer from the Central Station. This space has not yet been staffed. There is also a Port police officer stationed in the Ferry Building who responds to on-going police issues at the piers.^{5, 6}

¹ Telephone conversation with Sergeant Dan Greeley, Central Station, San Francisco Police Department, June 7, 1995.

² Ibid.

³ The Central District originally included an additional fourteen square blocks in the Tenderloin area, which has the highest rate of major crimes in the City. That area was assigned to the Tenderloin Task Force approximately three years ago and is no longer within the Central District.

⁴ Telephone conversation with Sergeant Dan Greeley, Central Station, San Francisco Police Department, June 7, 1995.

⁵ Personal interview with John Davies, Wharfinger, June 16, 1995.

⁶ Telephone conversation with Officer John Purenti, San Francisco Port Police, January 11, 1996.

The police boat is berthed at South Beach Harbor. It is manned by a volunteer staff, operating under the Special Operations Group. It is staffed for special events, such as the Fourth of July and Opening Day on the Bay, and as directed by the Chief.⁷

The Central District includes 42 reporting areas or plots. In 1994, the three plots that compose the area that includes Hyde Street Harbor, Fisherman's Wharf and Pier 45 reported a total number of 344 incidents which involved a police report. Major crimes that are reported include homicide, rape, robbery, assault, burglary, theft and auto theft. Of the crimes reported in the three plots surrounding the project area in 1994, 60 percent of the calls related to theft and grand theft. The entire Central District reported 15,843 incidents in 1994. For the first quarter of 1995, the three Central District plots surrounding the project area reported 47 incidents, with 36 percent being grand theft.⁸

FIRE PROTECTION SERVICES

The San Francisco Fire Department (SFFD) provides fire protection within the City limits. In the Fisherman's Wharf area, the Port of San Francisco Fire Marshall conducts pier inspections and investigates fires, hazardous materials incidents and other emergencies occurring on Port property. The U. S. Coast Guard responds to incidents at sea and assists the SFFD along the waterfront when called upon. The SFFD Fireboat is berthed at Pier 22-1/2.

Normal response to a fire within the project area would include 3 engines, 2 trucks, a rescue squad, a Fire Chief and an Assistant Chief. These services would be provided from nearby stations. The first stations to respond to a fire in the project area would be ⁹:

Engine No. 28	1814 Stockton Street
Engine No. 2	1340 Powell Street
Engine No. 41	1325 Leavenworth

⁷ Telephone conversation with Sergeant Dan Greeley, Central Station, San Francisco Police Department, June 7, 1995.

⁸ Communication with Officer Janet Lacampagne, San Francisco Police Department Planning Division, June 22, 1995.

⁹ Telephone conversation with Lt. Paul Fuhrman, San Francisco Fire Department Business Office, June 8, 1995.

Truck No. 2	1340 Powell Street
Truck No. 13	530 Sansome Street
Rescue Squad	Third and Howard Streets
Division 2 Chief	1301 Turk Street
Battalion 1 Assistant Chief	1340 Powell Street
Fire Boat	Pier 22-1/2

Typical first response times are 3.8 minutes for the first engine. Fire truck response time is slightly longer and averages approximately 5 minutes.¹⁰

As part of the 1989 Seismic Bond Program and the 1992 Fire Department Improvement Bond Program, several fire stations are undergoing seismic strengthening and facility upgrades. Fire Station No. 2, located at 1340 Powell Street was rebuilt from the ground up under this program and opened approximately one year ago.¹¹

The Bureau of Engineering and Water Supply is responsible for the management, operation and maintenance of the water supply systems used for firefighting. The Auxiliary Water Supply System (AWSS) is an independent, high-pressure, fresh-water water supply system used for fire suppression and the service area extends into the Fisherman's Wharf area.¹²

Since the wharf and project area are on infirm ground, no cisterns are located in the area. The Bay is used as a water source for the AWSS. Pier 45 and the Hyde Street Pier are served by three suction hydrants that the Fire Department checks monthly and services annually. They are located on the west side of the Hyde Street Pier; near Scoma's Restaurant; and on the north side of Jefferson Street at Jones Street (at the Inner Lagoon). In addition to the suction hydrants, there are three AWSS high pressure hydrants in the project area: at Leavenworth Street (north side of Jefferson Street); at Jones Street (south side of Jefferson Street); and on the north side of Jefferson Street (half way between Jones and Leavenworth Streets). The AWSS system pump station is located at the foot of Van Ness Avenue, near the Municipal Pier. The pump station was overhauled in 1986 as part of a bond issue. There is also a fireboat manifold at the foot of

¹⁰ Telephone conversation with Lt. Paul Fuhrman, San Francisco Fire Department Business Office, June 8, 1995.

¹¹ San Francisco Fire Department Annual Report 1992 - 1993, June 1, 1994.

¹² San Francisco Fire Department Annual Report 1992 - 1993, June 1, 1994.

Leavenworth Street (Richard Henry Dana Street). This manifold has ten three-inch connections.¹³ There is a fire alarm box along the Pier near Scoma's Restaurant.

In addition, there are low-pressure fire hydrants that access the municipal water supply at several locations in the proposed project area.¹⁴ Currently, the sheds on Pier 45 are served by fire sprinklers and low pressure hydrants.

¹³ Personal interview with Steven A. Van Dyke, Superintendent, San Francisco, Bureau of Engineering and Water Supply, June 16, 1995.

¹⁴ Personal interview with Bhulabhai Desai, Civil Engineer, San Francisco Water Department, Distribution Division, Engineering, June 7, 1995.

F. AIR QUALITY

METEOROLOGY AND CLIMATE

The Bay area's climate, as with all of California coastal environs, is dominated by the strength and position of the semi-permanent high pressure center over the Pacific Ocean near Hawaii. It creates cool summers, mild winters, and infrequent rainfall; it drives the cool daytime sea breeze and maintains comfortable humidities and ample sunshine. Temperatures in the San Francisco area average 57 degrees Fahrenheit annually, ranging from the mid-40s on winter mornings to the mid-70s in late summer afternoons. The strong onshore flow of wind in summer keeps cool air and frequent cloudiness over the Bay area until September when the offshore Pacific high pressure center weakens and migrates southward. Warmest temperatures generally occur in September and October. Temperature extremes, reaching 90 degrees or dropping to freezing, are rare in San Francisco. Rainfall in San Francisco averages 21 inches per year and is confined primarily to the "wet" season from late October to early May. Except for occasional light drizzles from thick marine stratus clouds, summers are almost completely dry.

Winds in the project area display several characteristic regimes. During the day, especially in summer, winds are from the northwest-west at 10 to 14 miles per hour as air is funneled through the Golden Gate. At night, especially in winter, the land becomes cooler than the water and an offshore flow off the hills develops over portions of the area. In San Francisco, however, the marine intrusion is so strong that the onshore flow persists both day and night during the warmer months. On the north side of San Francisco in both winter and summer, the background pollution upwind from the project area is generally sufficiently low such that the project area experiences excellent air quality and rarely exceeds clean air standards.

Based on the monthly climatic conditions as determined from long-term measurements at the downtown Federal Building, the following general climatic conditions occur at the project site:

- Sunniest and warmest conditions occur from June to September. The same time period experiences average daily wind speeds from the west greater than ten miles per hour, blowing almost 24 hours per day. During the daytime during summer months, windspeeds are even higher, with winds coming from the direction of Aquatic Park toward Pier 45.

- The warmest months in San Francisco are September and October when the onshore flow weakens as the Central Valley cools down. Average wind speeds during the warmest months with warmest air and water temperatures are still west to east, with average speeds of greater than eight miles per hour.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act Amendments of 1970 established national ambient air quality standards, and individual states retained the option to adopt more stringent standards or to include other pollutant species. California already had standards in existence before federal standards were established, and because of the unique meteorological conditions in the state, there is considerable diversity between state and federal standards currently in effect in California as shown in Appendix C, Table AQ-1.

The ambient air quality standards are the levels of air quality considered safe to protect the public health and welfare and incorporate an adequate margin of safety. They are designed to protect those segments of the public most susceptible to respiratory distress, known as sensitive receptors, such as asthmatics, the very young, the elderly, people weak from other illness or disease, or persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollution levels somewhat above the ambient air quality standards before adverse health effects are observed.

AMBIENT AIR QUALITY

The Bay Area Air Quality Management District (BAAQMD) operates a regional monitoring network which measures the ambient concentration of six air pollutants: ozone, carbon monoxide, fine particulate matter (inhalable- or respirable-sized particles), lead, nitrogen dioxide, and sulfur dioxide. On the basis of the monitoring data, the Bay Area, including the City and County of San Francisco, is designated an "attainment" area with respect to federal air quality standards. Air quality attainment means that state standards are met as required by the California Clean Air Act (AB-2595). San Francisco occasionally experiences violations of state eight-hour carbon monoxide and particulate matter standards, but has not recently violated the ozone standard. State ozone standards are exceeded in portions of the Bay Area Air Basin, especially the Santa Clarita and Livermore valleys.

Existing and probable future levels of air quality in San Francisco can be generally inferred from ambient air quality measurements conducted by the BAAQMD at its two San Francisco air monitoring stations. The Potrero Hill station at 10 Arkansas Street measures all criteria pollutants, including regional pollutants such as ozone, as well as primary vehicular pollutants near busy roadways such as carbon monoxide. The station at 939 Ellis Street at the BAAQMD headquarters measures only carbon monoxide. Appendix C, Table AQ-2 summarizes the last six years of published data (1988 to 1993) from these monitoring stations. Final data for 1994 are not yet available as of March 1996. During this six-year period, there were no violations of the one-hour or eight-hour carbon monoxide standards at the Arkansas Street monitoring station. The state particulate matter standard was violated five days out of 61 measurement days in 1993, compared to nine days out of 61 measurement days in 1992. At the Ellis Street monitoring station, the carbon monoxide standard was violated once in 1988, and the ozone, nitrogen dioxide, and particulate sulfate measurements were within the allowable maximum concentrations for the six-year period.

Comparison of these data with those from other BAAQMD monitoring stations indicates that San Francisco's air quality is among the least degraded of all developed portions of the Bay area. Three of the four prevailing winds (west, northwest, and west-northwest) blowing off the Pacific Ocean reduce the potential for San Francisco to receive air pollutants from elsewhere in the region.

Data from air quality monitoring in San Francisco show that there have been infrequent local exceedences of state and federal carbon monoxide and inhalable particulate matter standards, largely due to air pollutant emissions from within the City. Carbon monoxide is a non-reactive air pollutant, the major source of which is motor vehicles. Carbon monoxide concentrations are generally highest during periods of peak traffic congestion. The last violation of the carbon monoxide standard in the City was in 1988.

The primary sources of particulates in San Francisco are construction and demolition, combustion of fuels for heating, and vehicle travel over paved roads. Airborne dust levels measured in San Francisco show occasional violations of the state inhalable particulate standards, and maximum particulate levels have decreased slightly over the six-year period from 1988 to 1993. In general, particulate levels are relatively low near the coast, increase with

increasing distance from the coast, and peak in dry, sheltered valleys. One federal standard violation occurred in 1990, though federal guidelines allow for no more than one violation per year averaged over a three-year period in defining a "non-attainment" area.

SOURCES OF EMISSIONS

The automobile and other mobile sources are the dominant contributors to the regional pollution burden for nitrogen dioxide and carbon monoxide. These sources also contribute a substantial fraction of reactive organic gases, the other important precursor to regional smog formation. Table 7 summarizes the air basin pollution inventory for 1991 which is the current attainment planning inventory.

On-road emission sources, of which existing travel to and from Fisherman's Wharf is a small fraction of all regional travel, generate 24 percent of all reactive organic gases, 53 percent of nitrogen oxides, and 67 percent of all regional carbon monoxide emissions. Ship emissions, which include the current commercial fishing vessels at Pier 45, contribute less than two percent of reactive organic gases, less than three percent of nitrogen oxides, and less than four percent of all basinwide carbon monoxide emissions.

TABLE 7. BAY AREA AIR BASIN EMISSIONS INVENTORY, 1991 (tons/day)

Emission Source	Inhalable Particulate	Reactive Organic Gases	Nitrogen Oxides	Sulfur Oxides	Carbon Monoxide
Industrial Processes	197	59	52	55	35
Evaporative Emissions	--	118	--	--	--
Combustion of Fuels	35	21	106	15	216
Total Stationary Sources	232	198	158	70	251
Cars & Pick-up Trucks	25	137	144	8	1100
Other On-Road	25	63	147	19	529
Ships, Boats & Trains	1	20	16	18	82
Aircraft	3	17	16	1	75
Off-Road Equipment	5	27	69	6	342
Total Mobile Sources	59	264	392	52	2128
TOTAL MISC. SOURCES	753	351	1	--	50
TOTAL ALL SOURCES	1044	819	551	122	2429

Source: Bay Area Air Quality Management District, 1993. *Air Quality Handbook*.
Appendix IV.

AIR QUALITY PLANNING

The 1977 Clean Air Act required that regional planning and air pollution control agencies prepare a regional Air Quality Plan to outline the measures by which both stationary and mobile sources of pollutants can be controlled in order to achieve all standards within the deadlines specified in the Clean Air Act. For the Bay Area Air Basin, the Association of Bay Area Governments (ABAG), the Metropolitan Transportation Commission (MTC), and the BAAQMD jointly prepared a Bay Area Air Quality Plan in 1982 which predicted attainment of all national clean air standards within the basin by 1987. Although air quality improvements were made, the Bay Area failed to attain national and state ambient air quality standards for carbon monoxide and ozone by 1987. However, by 1994, regional air quality monitoring data indicated that the Bay Area had attained the national ozone and carbon monoxide standards and the state carbon monoxide standard.

In June 1995, the U.S. EPA designated the Bay Area as an attainment area with respect to the national ozone standard. The BAAQMD has applied to the U.S. EPA for attainment status for carbon monoxide since none of the regional monitoring stations has recorded an exceedance of the national standard since 1991. However, the Bay Area has not yet been granted official federal designation as an attainment area with respect to carbon monoxide.¹ Under the federal Clean Air Act, regions that have attained air quality standards still must demonstrate how they will maintain compliance with the federal standards in future years. Therefore, the BAAQMD has developed Maintenance Plans for the Bay Area for ozone and carbon monoxide. For inhalable particulate matter, the basin is "unclassified" at present, awaiting a possible revision of particulate standards to include only very fine particulate matter.

With respect to the more stringent state ambient air quality standards, the Bay Area Air Basin is currently a "non-attainment" area for ozone and inhalable particulate matter standards. The 1988 California Clean Air Act (AB-2595) required development of air quality plans and strategies to reduce ozone and carbon monoxide levels in the Bay Area. As a result, a more recent Bay Area Clean Air Plan was prepared in 1994, with the main objective of attaining the state ozone

¹ Henry Hilken, Planner, Bay Area Air Quality Management District. Telephone communication with Joyce Hsiao, Orion Environmental Associates, March 1996.

standard. Attainment of the California ozone standard in the Bay Area has not yet occurred, since emissions reductions as required by the Clean Air Plan are partially offset by new emissions from population and industry growth in the basin.

The 1994 Bay Area Clean Air Plan contains specific measures aimed to reduce indirect sources of emissions, including transportation control measures designed to reduce the contribution of the automobile as the single-most important contributor to degraded air quality. Any project which attracts a substantial increase in automobile traffic or marine vessel activity may have an effect on air quality planning if the associated emissions have not been accounted for in the regional air quality plan.

Currently, there are no existing state requirements regulating air pollutant emissions from fishing boats. However, the State Implementation Plan includes measures calling for marine vessels to meet the federal standards for nitrogen oxide emissions. The Plan indicates that reduction in nitrogen oxide emissions from marine vessels could be achieved by the year 2005.²

ODOR REGULATION

The Bay Area Air Quality Management District regulates odor emissions in San Francisco under the District's Odor Regulation (Regulation 7) and the Public Nuisance laws (California Health and Safety Code, Section 41700). Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds; in addition, if the District receives and confirms odor complaints from ten or more members of the public within a 90-day period, the District has the authority to collect an air sample and can issue a violation notice. Under the Public Nuisance regulation, five confirmed odor complaints within a 24-hour period is considered a violation and would initiate action by the BAAQMD with the originator of the odor source to determine if the odor can be reduced.³ In the Fisherman's Wharf area, there have been no odor complaints within the last year.⁴

² Telephone communication with Jackie Lourenco, Manager of Off-Road Control Section, California Air Resources Board with Joyce Hsiao, Orion Environmental Associates, June 12, 1995.

³ Telephone communication with Joe Steinberger, Planner, Bay Area Air Quality Management District with Joyce Hsiao, Orion Environmental Associates, June 12, 1995, and Bay Area Air Quality Management District pamphlet entitled "Odors."

⁴ Telephone communication with Jim Ting, Area Inspector, Bay Area Air Quality Management District with Evelyn Shellenberg, Orion Environmental Associates, January 12, 1996.

G. TRANSPORTATION

This section describes the existing conditions of the transportation system in the vicinity of the proposed project. Included are the roadway system traffic operations, transit service, parking, pedestrian circulation and access, truck traffic and safety conditions.

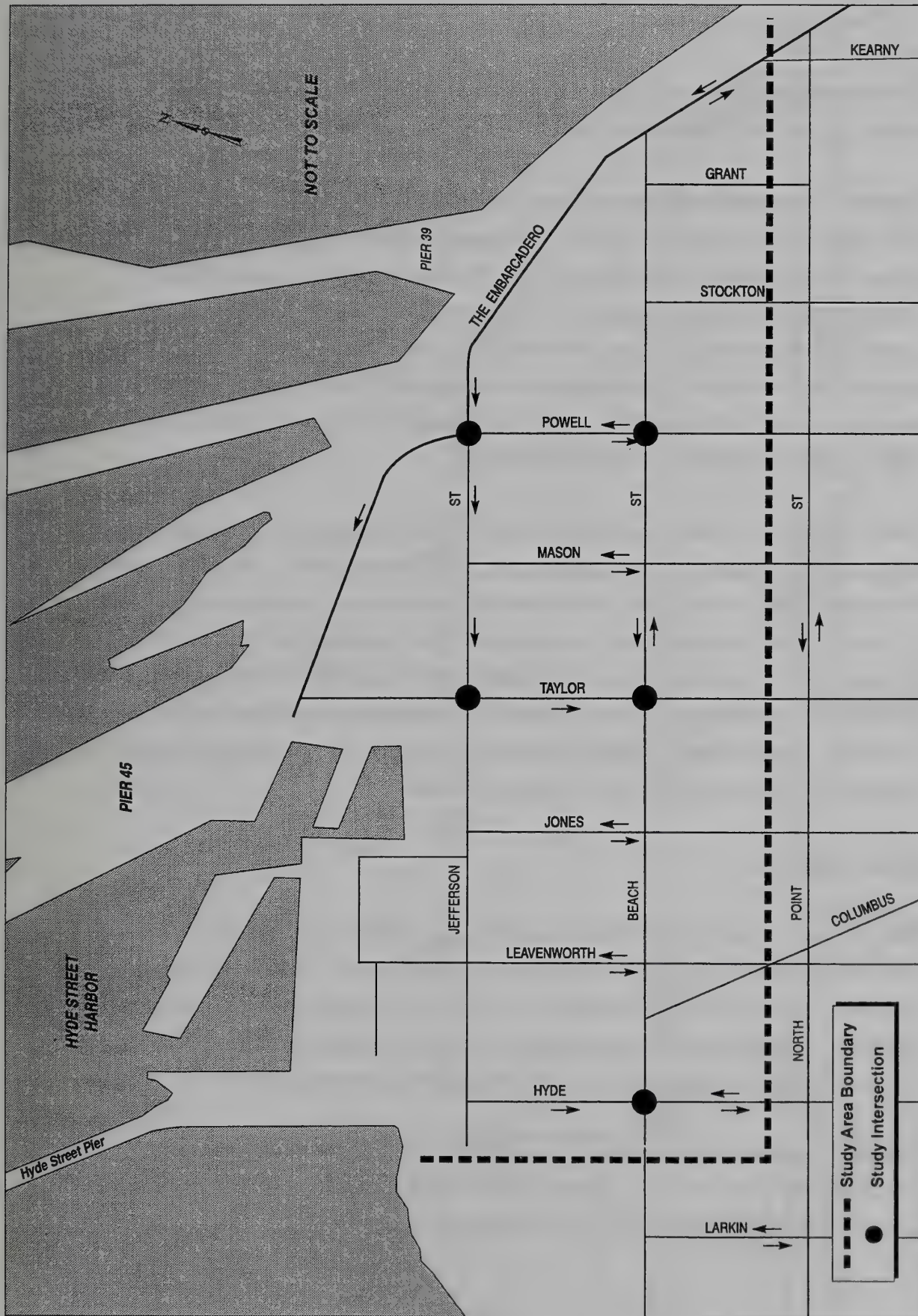
The transportation study area is bounded by Hyde Street to the west, San Francisco Bay to the north and east, and Beach Street to the South. The transportation study area and intersections that were analyzed are shown in Figure 14.

A network of highways and major arterials provide direct access between the project study area and other destinations in the city and region. Regional access to the project site is provided by three freeways: U.S. 101 to the north via Van Ness Avenue and Lombard Street, Interstate 80 to the East Bay and Central Valley via The Embarcadero, U.S. 101/I-280 to the Peninsula and the South Bay via Van Ness Avenue.

Most of the traffic coming into the study area arrives via The Embarcadero. The Embarcadero is defined in the City's Master Plan as a major arterial and a recreational street west of North Point Street. The Embarcadero east of North Point Street is included in the Congestion Management Program. As defined by the City's Master Plan, Transit Preferential Streets within the study area include Jefferson, Beach and Hyde Streets (south of Beach Street). In addition to the The Embarcadero, Jefferson and Beach Streets are designated recreational streets. Local streets providing access within the study area include Leavenworth, Jones, Mason and Powell Streets.

EXISTING TRAFFIC CONDITIONS

Operating characteristics of intersections are described by the use of the level of service (LOS) concept. The Level of Service is a qualitative description of an intersection's performance based on delay per vehicle. Intersection Level of Service ranges from LOS A, which indicates free flow



HYDE STREET HARBOR / PIER 45 EIR

Figure 14

TRANSPORTATION STUDY AREA

or excellent conditions, to LOS F, which indicates jammed or overloaded conditions. Refer to Appendix D for more detailed description of the LOS designations for intersections.

Signalized intersections were evaluated using the *Highway Capacity Manual, Special Report 209, TRB, 1985*, intersection analysis method. Unsignalized intersections were evaluated using the *Highway Capacity Manual, Special Report 209, TRB, 1985* operations methodology for intersection delay, outlined in Chapter 10. This method determines the capacity of each movement of the intersection. Level of Service is then based on the average total delay per vehicle for each movement. Level of Service for unsignalized intersections ranges from LOS A, which is generally free-flow conditions with minor delays for minor street traffic, to LOS F, which indicates very long delays for the minor street traffic.

Traffic conditions in the study area were characterized by examining peak-hour operations during weekday AM and PM peak hours, as well as the weekend midday peak hour, at five intersections within the study area. All the analysis intersections in the study area operate at LOS A or B during the weekday and weekend peak hours, indicating that most traffic flows in the study area do not experience excessive delays. The intersection of Jefferson/Powell/The Embarcadero and the intersection of Jefferson/Taylor experience the highest levels of congestion. Weekend traffic volumes are higher than weekday volumes, and the levels of congestion are also somewhat higher during the weekend.

TRANSIT SERVICES

Within the study area, the City's Master Plan designates Jefferson Street, Beach Street, and Hyde Street (south of Beach Street) as Transit Preferential Streets. A transit preferential street is defined as a street where transit vehicles could receive priority treatment for the use of street right-of-way. Transit service in the study area includes San Francisco MUNI bus lines and cable cars, Golden Gate Transit bus lines, and a number of ferry operators.

There are six existing MUNI lines directly serving the study area, #19, #30, #32, #39, #42 and #15. Figure 15 shows the routes of these six lines and the bus stop locations. Table 8 summarizes bus route descriptions, service frequencies and load factors.

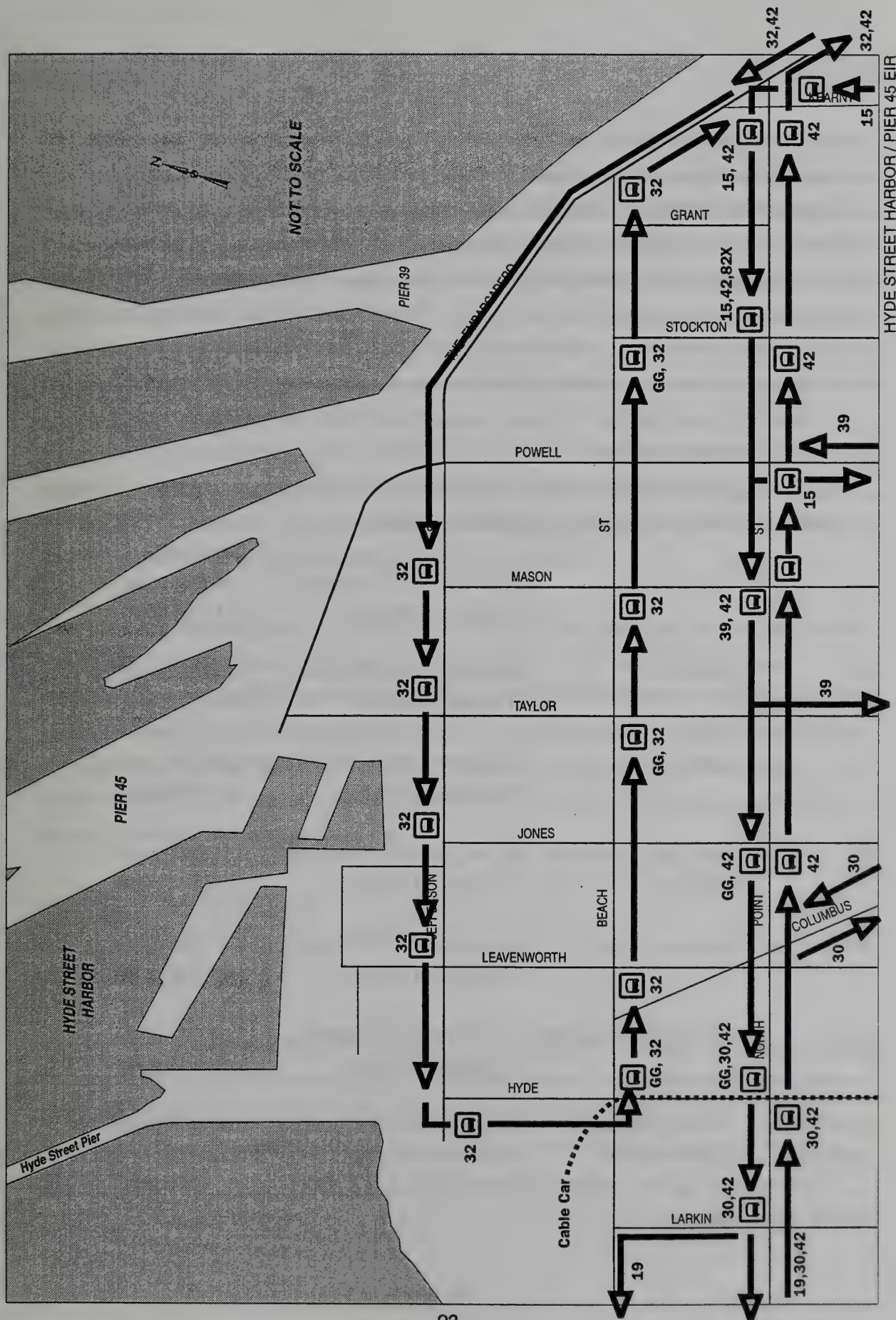


Figure 15
EXISTING TRANSIT NETWORK AND STOP LOCATIONS

In order to achieve an efficient transit system, MUNI's goal is to not exceed the peak load factor standards for each type of transit vehicle. The peak load factor is defined as the ratio of passengers to seats during the peak hour. When the passenger to seat ratio exceeds 1.00, the transit vehicle is operating with patrons exceeding the seating capacity and with patrons standing in the aisle. The peak load factor for lines operating with motor coaches is 1.55 and for cable car lines, the optimal peak load factor is 2.0. Since the load factors presented below are based on ridership levels at the route's maximum load point, they may be lower in the vicinity of the project site. All bus lines operate with excess capacity during the AM and PM peak hours.

Table 8 MUNI Transit Routes

Bus Route	Route Description	Headways (minutes)	Peak Load Factor (Weekday)
19	Polk	10 (AM peak) 15 (PM peak) 20 (weekend midday)	1.66 (AM peak) 1.14 (PM peak)
30	Stockton	4 (weekday AM & PM peak) 6 (weekend midday)	1.38 (AM peak) 1.42 (PM peak)
32	Embarcadero	12 (weekday AM & PM peak) 20 (weekend midday)	0.73 (AM peak) 1.00 (PM peak)
39	Coit Tower to Northern Waterfront	30 (AM peak) 20 (PM peak) 20 (weekend midday)	0.12 (AM peak) 0.50 (PM peak)
42	Downtown Loop	9 (weekday AM & PM peak) 20 (weekend midday)	1.39 (AM peak) 1.25 (PM peak)
15	Third Street Crosstown	5 (AM peak) 6 (PM peak) 10 (weekend midday)	1.39 (AM peak) 1.15 (PM peak)
Powell-Hyde Cable Car	Powell & Market to Hyde & Beach	10 (AM peak) 6 (PM peak) 6 (weekend midday)	0.92 (AM peak) 2.22 (PM peak)

Source: Körve Engineering, Inc.

Two cable car routes serve the Fisherman's Wharf area, connecting with the Union Street retail and hotel district. The Powell-Hyde Street cable car operates within the study area's western boundary and terminates north of the intersection of Beach and Hyde Streets. The Powell-Mason line terminates outside of the study area south of Bay Street on Taylor Street. In general, during the weekday PM and weekend midday peak periods, the cable cars operate at full capacity.

Golden Gate Transit, serving Marin County, travels through the study area and shares MUNI bus stops on Beach Street, and on North Point Street just south of the study area. Two basic bus routes and 19 commuter hour express bus lines provide services in the study area. Only alightings are allowed from Golden Gate Transit buses destined to San Francisco from Marin and Sonoma Counties, and conversely, only boardings are allowed onto Golden Gate buses destined to Marin and Sonoma Counties from San Francisco.

Ferry service to the study area is provided by a number of ferry operators between Pier 39 and Pier 43-1/2. Service includes the Red and White fleet service between Pier 43-1/2 and Sausalito, Tiburon and Angel Island, and the Blue and Gold Service between Pier 39 and Vallejo, and also between Pier 39 and Oakland/Alameda. In addition, the Red and White fleet provides ferry service to Alcatraz from Pier 41. The ferry service at Fisherman's Wharf is generally recreational service, as commute service is provided to the Ferry Building, located at the foot of Market Street in downtown San Francisco.

PARKING FACILITIES AND USE

Off-Street Parking

Nineteen parking facilities within the study area were surveyed in February 1995. A total of 3,850 spaces are available at these off-street parking facilities, of which 461 are private parking spaces, and 3,389 are public parking spaces. The midday off-street parking occupancy for the study area is higher on weekends than on weekdays. The average occupancy rate for all facilities is 56% for the weekday midday peak period, and 74% for the weekend midday peak period.

The average occupancy rates for the public facilities are 55% and 74% for the weekday and weekend peak periods, respectively, and 66% and 73% for the private facilities for the weekday and weekend peak period, respectively. Some of the public parking facilities, such as the Pier & Wharf Parking on Beach Street and Fisherman Wharf Parking surface lot have higher occupancy rates (92% - 106%) during the weekends than other facilities due to their proximity to major tourist attractions.

On-Street Parking

On-street parking is permitted within the study area, however, much of the on-street parking is restricted for special purposes, such as tour bus parking and truck loading/unloading, or limited to two-hour metered parking. An on-street parking survey was conducted to determine early morning and afternoon parking activity. From the hours of 5:00 to 8:00 AM, the on-street parking on Jefferson Street between Taylor and Hyde Streets is fully utilized by delivery trucks and the trucks that are part of the commercial fish trading. By midmorning, curb parking is generally fully occupied by visitors and employees, and a number of vehicles were observed illegally parked in No Parking zones, in driveways and between meters.

PEDESTRIAN CIRCULATION

The project study area is within the heart of the tourist area of Fisherman's Wharf. Nearly all access to businesses and attractions at the Wharf is made by walking, either from cable cars, buses, parked autos or nearby hotels. In the study area, The Embarcadero, Jefferson Street and Beach Street are designated in the Master Plan as recreational streets, and in addition to Taylor Street, are the major pedestrian routes in the area. (A recreational street is a special category of street, whose major function is to provide for slow pleasure drivers, cyclists and pedestrian use.) Pedestrian activity levels are generally light in the morning, and increase following the opening of stores between 9:00 and 10:00 AM.

Weekday and weekend midday peak hour pedestrian counts were conducted on March 16 and 25, 1995 for all the four crosswalks at the intersection of Taylor Street and Jefferson Street. The

existing LOS for these crosswalks was calculated using the methodology outlined in Chapter 13 of the *1985 Highway Capacity Manual*. The intersection of Jefferson/Taylor is located in the center of the entire Fisherman's Wharf tourist district. The total pedestrian volumes during the weekend peak 15-minute period are approximately 1.4 times higher than the weekday volumes.

Operating conditions on crosswalks are measured by pedestrian density, square feet of crosswalk space per pedestrian (sq.ft. /ped). Typically, an upper limit for desirable conditions is 15 sq.ft./ped or LOS D. The LOS is presented for "maximum surge" conditions, which represent the conditions at opposing ends of the crosswalk when the WALK phase begins as two opposing platoons simultaneously step onto the crosswalks.

Weekday Midday Conditions: During the weekday midday peak 15-minute period, the four crosswalks experience LOS B (south and west crosswalks), and LOS C (north and east crosswalks) conditions.

Weekend Midday Conditions: During the weekend midday peak 15-minute period, the level-of-service for all four crosswalks changes noticeably from weekday midday conditions. The LOS at the south crosswalk worsens from LOS B to C, whereas the north and west crosswalks experience LOS D. The east crosswalk, with the heaviest pedestrian volumes operates at LOS E. This indicates that the capacity of the crosswalk is reached and there is limited space to pass slower pedestrians.

In the immediate vicinity of Pier 45, on Taylor Street between The Embarcadero and Jefferson Street, and on The Embarcadero between Taylor Street and Powell Street, pedestrian activity levels are congested during the weekday and weekend midday peak periods. This is due primarily to the restaurants on the west side of Taylor Street, which essentially "extend" their operations onto the sidewalks, and the tour bus drop-off and pickup activities on the north curb of The Embarcadero (the south side does not have any sidewalks). During the midday peak periods, pedestrian traffic on the north sidewalk was observed to be slow moving (typical of tourist activities) and congested.

TRUCK TRAFFIC

Truck Percentages

Vehicle classification counts were conducted at the five study intersections, and at the intersection of The Embarcadero and Taylor Street, to determine the percentage of trucks during the peak periods. During the weekday AM peak hour, the heaviest truck activities (10.7%) occurred at the intersection of The Embarcadero and Taylor Street (nine trucks entering and exiting Pier 45), and the truck percentage for the remaining five intersections range from 0.6% to 2.5% of the total vehicles. During the weekday PM peak hour, the intersection of The Embarcadero and Taylor Street again exhibits the highest truck percentage (1.9%). The truck percentages at the remaining five intersections range from 0.6% to 1.0% of the total vehicles.

During the weekend midday peak hour, the overall truck percentage decreased slightly as compared to the weekday AM and PM peak periods. The intersection of The Embarcadero and Taylor Street intersection has the highest truck percentage (1.8%) while the truck percentage for the remaining intersections range from 0.2% to 0.9% of the total vehicles recorded.

Morning Fish Trading Activity

Truck activities during the early morning period between 5:00 - 8:00 AM, were observed on a number of days, and recorded for April 12, 1995. The purpose of the observation was to determine whether there are any existing conflicts between trucking activity and vehicular and pedestrian traffic. The observation was made along Jefferson Street, between Jones and Hyde Streets where most of the fish trading trucking activities are concentrated. The heaviest trucking activity occurs at around 6:30 AM along Jefferson Street between Jones and Leavenworth Streets.

Since both auto and pedestrian activities are either minimal or absent during these early hours, there are no major conflicts. However, since both sides of the sidewalks between Jones and Hyde Streets on Jefferson Street are involved with loading activities, joggers and swimmers going between the clubhouse and Pier 39 were observed walking and running along the middle of Jefferson Street to bypass this two-block section.

PLANNED ROADWAY AND TRANSIT IMPROVEMENTS

Within the study area there are two planned improvements that would affect traffic conditions in the area of the proposed Project. These improvements include the construction of the electric street car line (F-Market line) along The Embarcadero to the northern waterfront, and improvements/relocation of the entrances and exits of the Pier 39 garage.

MUNI F-Market Line

The extension of the historic MUNI F-Market line into the Northern Waterfront is currently either in construction (section between Broadway and North Point) or in design stages (Mid-Embarcadero and Lower Market sections). This surface electric streetcar service will be provided from Upper Market at Castro Street to the waterfront via Market Street, and north to Fisherman's Wharf via The Embarcadero, Jefferson Street and Beach Street. Streetcars already operate on Market Street from Upper Market to First Street, and it is anticipated that streetcar service from First Street to Fisherman's Wharf will be implemented in 1999.

In the vicinity of the proposed project, the F-line will be side-aligned on The Embarcadero and on Jefferson Street. At Jones Street, it will loop to Beach Street, and continue southbound on Beach Street to The Embarcadero. Detailed design has not been completed for this section of the F-Market line. However, it is assumed that on Jones and Beach Street, the F-Market line will share the curb lanes (right turn lanes) on Jones and Beach Streets with vehicular traffic.

The F-Market line service would consist of seventeen PCC cars, and will operate at approximately 7.5 minute headways during the peak hours, and 15 minute headways during non-peak hours. The route is anticipated to serve commute riders as well as tourists. The F-Market line will provide a tourist-oriented alternative similar to cable cars. Upon completion of the F-Market line, the MUNI #32 line will be terminated. The F-Market line would accommodate the #32 line patrons and a portion of the existing and new cable car trips, which would switch to the F-Market line. In addition, it could be anticipated that some visitors currently driving to the area would shift to the F-Market line. The new service will provide a convenient link (no transfers between lines would be required) between Market Street and the northern waterfront.

Pier 39 Garage

Planned improvements to the entrances and exits at the Pier 39 garage would affect the existing geometries at the intersection of Jefferson/Powell/The Embarcadero. The entrance/exit will be relocated from Powell Street to The Embarcadero, Stockton and Beach Street. This would result in the elimination of the exclusive lanes dedicated to the garage entrance and exit on The Embarcadero and Powell Street. The entrance to the garage will be from Beach Street, and the exit will be on The Embarcadero south of Powell Street and on Stockton Street.

Roadway geometry changes associated with this entrance/exit relocation include the provision of a left turn pocket from The Embarcadero westbound onto Powell Street southbound, one southbound lane on Powell Street between The Embarcadero/Jefferson Street and Beach Street, and the restriping of the two northbound lanes on Powell Street to one northbound through lane and one northbound through/left lane.

H. HAZARDS

The Hazardous Materials Setting presents an overview of the hazardous materials regulatory framework and an overview of existing site conditions related to proposed construction activities for the Harbor Services Facilities. A site history for the area of the new facilities has been prepared to provide a basis for evaluating the potential presence of hazardous materials in the soil where soil would be excavated for utility lines. Reconstruction of the Hyde Street Pier and renovation of Sheds A and C would not involve the excavation of soil and a site history has not been prepared for these areas.

DEFINITION OF A HAZARDOUS MATERIAL/WASTE

Hazardous materials are generally considered to be substances with certain chemical or physical properties which may pose a substantial present or future hazard to human health or the environment when improperly handled, stored, disposed or otherwise managed. In general, discarded, abandoned, or inherently waste-like hazardous materials are referred to as hazardous wastes. A material is a hazardous waste if it poses a threat to human health or the environment.¹ Hazardous materials and hazardous wastes are defined in the *California Code of Regulations*, Title 22, Sections 66260 through 66261.10. As defined in Title 22, hazardous materials are grouped into four general categories: toxic (causes human health effects); ignitable (has the ability to burn); corrosive (causes severe burns or damages materials); or reactive (causes explosions or generates toxic gasses). A hazardous waste can be present in a liquid, semi-solid, solid, or gaseous form.

REGULATORY FRAMEWORK

Hazardous materials and hazardous wastes are regulated by federal, state, regional, and local laws and regulations with the objective of protecting public health and the environment. In general, these regulations provide definitions of hazardous substances; establish reporting requirements; set guidelines for handling, storage, transport, remediation and disposal of

¹ California Code of Regulations, Title 22, Section 66261.2.

hazardous wastes; and require health and safety provisions for both workers and the public, such as emergency response, worker training programs, and health and safety plans. Sites which are subject to these regulations, including underground storage tank sites, are identified on periodically updated published lists at the federal, state, and local levels. The dredging and disposal of Bay sediments is also regulated at the federal, regional, and state levels.

Some major agencies enforcing these regulations include: the U.S. Environmental Protection Agency (federal); the California Environmental Protection Agency (State) consisting of the Department of Toxic Substances Control, the State Water Resources Control Board, and the California Air Resources Board as well as other state agencies. ; the San Francisco Department of Public Health, Bureau of Toxics, Health, and Safety Services (local); the San Francisco Fire Department (local); the U.S. Army Corps of Engineers (federal); and the Bay Conservation and Development Commission (regional). The San Francisco Bay Regional Water Quality Control Board works with the State Water Resources Control Board and enforces regulations on a regional basis. The Bay Area Air Quality Management District (BAAQMD) works with the California Air Resources Board and enforces regulations on a regional basis. Appendix E presents a description of the major hazardous materials regulations and the agencies implementing them.

SITE HISTORY

Installation of the proposed utilities for the new Harbor Services Facilities would include the excavation of soil that could potentially contain hazardous materials because of previous land uses adjacent to the alignment or because hazardous materials may have been contained in materials that were used to fill the area. If hazardous materials are present, special measures may be required to protect human health and the environment during the installation of the utilities, and specific handling and disposal methods may also be required for the excavated soil. Article 20 of the San Francisco Public Works Code (the "Maher" Ordinance) requires applicants for building permits to prepare a site history for any project bayward of the historic high tideline indicated on Historic San Francisco Maps that would involve the excavation of 50 or more cubic yards of soil.

Portions of the proposed project, including the location of the proposed utility alignment, are bayward of the historic high tide line. A site history has been prepared for the area of the proposed utility alignment (shown on Figure 16) to comply with the "Maher" Ordinance because it is expected that installation of the utilities would require excavating greater than 50 cubic yards of soil.² The site history is described below and Table E-1 in Appendix E summarizes the previous land uses. The address of each site referenced is shown on Figure 16. (See also, IV ENVIRONMENTAL IMPACTS, H. Hazards)

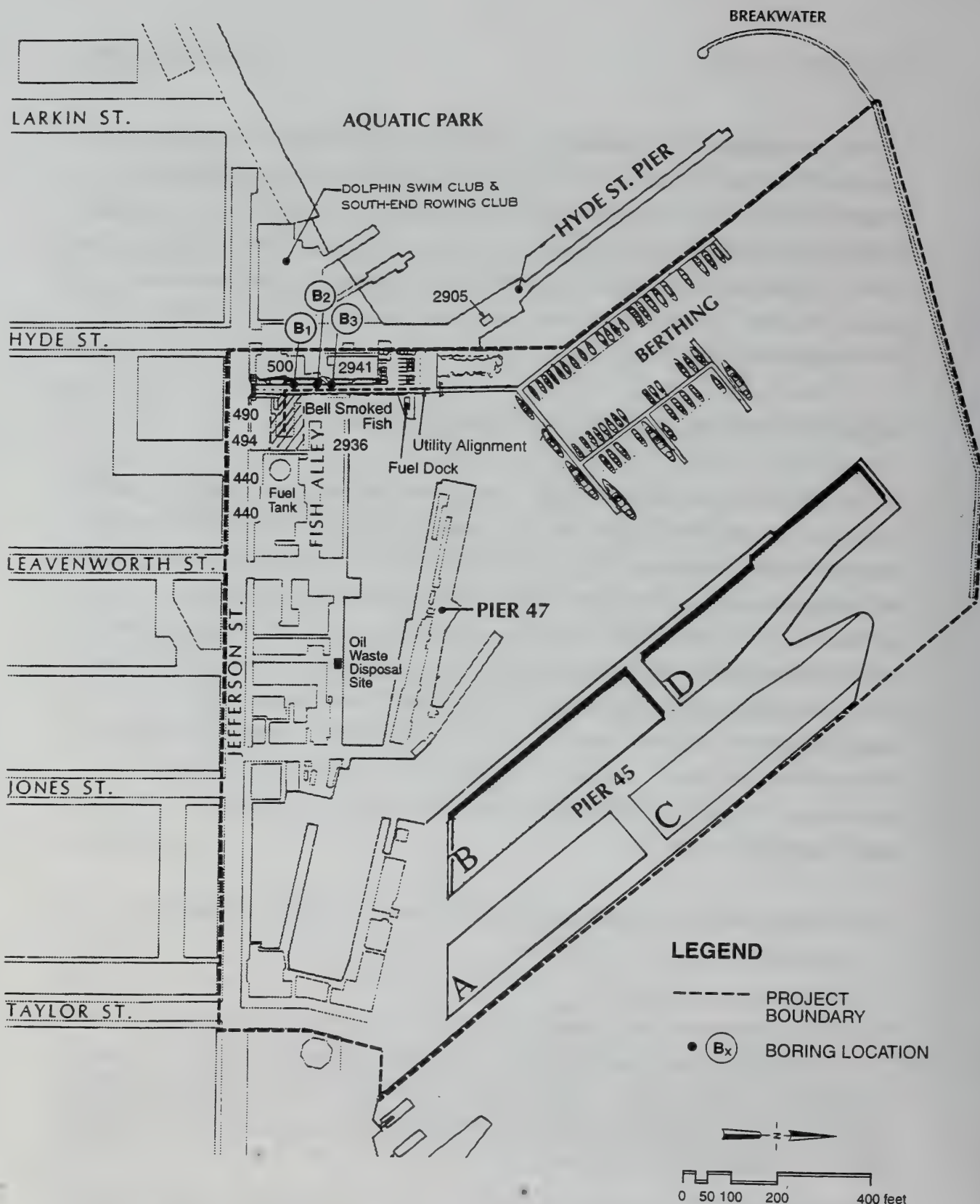
Vicinity of Proposed Utility Alignment to Harbor Service Facilities

Previous land uses to the immediate south of the proposed utility alignment (part of the Harbor Service Facilities) are identified in this section because of heavy industrial usage with potential disposal of waste in the location of the proposed alignment. From 1864 to 1865, Selby Smelting and Leadworks was constructed on the block bound by Jefferson, Hyde, Beach and Leavenworth streets. For twenty years, lead-based and other ores, including galena (a lead-based ore), were refined at this facility using the Pattison process to separate gold and silver from the ores. The ore was brought by train to the smelter where it was crushed and then heated to remove impurities and separate the metals. The smelter reportedly dumped slag (waste ore remaining after processing) into the Bay off of the wharf; the location was approximately at the line of Jefferson Street between Hyde and Leavenworth streets. The smelter shut down in 1885.³

The Equitable Gaslight Company was incorporated in February 1898 and constructed a

² The following sources were reviewed to complete the site history: aerial photographs dated 1935, 1948, 1963, 1969, 1975, 1981, 1986, 1991, and 1994; Sanborn maps (fire insurance maps which show the historic configuration of properties including the presence of features such as above and below ground tanks) dated 1899, 1913, 1948, 1950, 1974, and 1994; Archeological/Historical Consultants A Cultural Resources Overview of the Fisherman's Wharf Seafood Center Project Area and Environs, March, 1989; Polk and Haines Criss Cross San Francisco City Directories; San Francisco Fire Department files, including underground tank permits; San Francisco Department of Public Health Sites and Tank Listings by Site Address dated December 21, 1994; and San Francisco Department of Public Health Sites and Tank Closure Report by Site Address dated December 21, 1994.

³ Archeological/Historical Consultants, 1989. A Cultural Resources Overview of the Fisherman's Wharf Seafood Center Project Area and Environs. March. Available for review at the Planning Department, 1660 Mission - 4th Fl. (Part of the technical files for this EIR, available for review at the Planning Department, 1660 Mission Street, Fourth Floor.)



HAZARDS SITES IN STUDY AREA

FIGURE NO. 16

manufactured gas plant on the site of the smelter.⁴ The plant was originally intended to use the Hall process to produce manufactured gas. This process reportedly used coal as its main feedstock and a coal wharf was located along Jefferson Street. The 1948-1994 Sanborn maps show a 47,000-gallon above-ground crude oil tank located at the intersection of Hyde and Jefferson Streets and two gas holders, each capable of holding 180,000 cubic feet of gas. To the east of the holders, there were gas generators and purifiers. The fuels used were reportedly coal and oil. There was a pipe shop located within the plant and a portion of the plant was constructed on refuse fill.

Attempts to use the Hall process failed and the plant was converted to a small "water gas" plant in 1899 to 1900.⁵ This process involved steam heating crude oil and capturing the resulting gas. The gas was then scrubbed and purified and stored prior to distribution through pipes to various points of consumption. Available Sanborn maps do not show the configuration of this plant. In December 1900, the plant suffered an explosion in the engine room when a water tank reportedly crashed through the roof of the main building and ruptured underlying pipelines which subsequently exploded. The facility was flooded with water from the tank. Oil may have been spilled as a result of the explosion and spread with the flood. The plant was purchased by the San Francisco Gas and Electric Company in August 1903 and then completely destroyed in the 1906 earthquake and fire. It was reportedly not in use at that time and was never rebuilt.

The California Fruit Canners Association, North Point Cannery was constructed on the same block as the manufactured gas plant in 1907 to 1909.⁶ The warehouse facilities were located in the western portion of the block and the processing facilities were located in the eastern portion of the block. The 1913 Sanborn map shows three 3,000-gallon underground storage tanks and one 15,000-gallon underground storage tank used for the storage of crude oil. A portion of the facility was used for box printing.

The 1948 Sanborn map shows that the old Cannery building was owned by Haslett Warehouse

⁴ Archeological/Historical Consultants, 1989.

⁵ Archeological/Historical Consultants, 1989.

⁶ Archeological/Historical Consultants, 1989.

Company and the 1950 Sanborn map shows that a portion of the site was used by the Warehouse Service Company, also for storage. The 1994 Sanborn map shows that the eastern portion of the block was used by the Cannery for arcade store, bazaars, restaurants, and market places. The western portion of the block was either vacant or used as offices. The three-3,000 gallon underground storage tanks are no longer shown on the 1948 Sanborn map but the 15,000-gallon underground storage tank is still shown through 1994.

Proposed Utility Alignment to Harbor Service Facilities

The site of the proposed utility alignment was filled on several occasions. As stated above, it is reported that smelter waste was dumped off the wharf along Jefferson Street prior to 1885. After the 1906 earthquake and fire, tons of earthquake debris were also dumped along the tideline of the North Beach region;⁷ this was the first stage of the major filling within the project area. The 1913 Sanborn map shows that area to the north of Jefferson Street was beginning to be filled. The location of the proposed utility alignment was primarily submerged.

By 1914 the California Belt Railroad was built along Jefferson Street to transport materials needed to build the structures and exhibits of the 1915 Panama Pacific International Exposition in the Marina District.⁸ To reach the Marina it was necessary to tunnel beneath Fort Mason, and rock from the tunnel was used to build an embankment in the area of Hyde and Larkin streets.

The second major stage of filling within the project area was the construction of an outer breakwater along the Embarcadero between Jones and Hyde streets from 1916 to 1917.⁹ This included the construction of a wing wall extending along Hyde Street to Jefferson Street. The area within the breakwater was then dredged to form a lagoon for the fishing boats of Fisherman's Wharf. Over the next few years, the State Harbor Commission built several wharves within the project area for the fishing industry. These wharves were typically constructed on creosoted timber piles with concrete decks or asphalt covered timber decks.

⁷ Archeological/Historical Consultants, 1989.

⁸ Archeological/Historical Consultants, 1989.

⁹ Archeological/Historical Consultants, 1989.

The final stage of filling in the project area took place in the 1920s and early 1930s when the Hyde Street Pier and Pier 45 were built and the Aquatic Park was completed. The Hyde Street Pier was built in the 1920's to provide accommodations for the Golden Gate Ferry Company which provided service to Sausalito and Berkeley. Later, two ferry slips and a parking wharf were built at the base of Hyde Street; the main aprons were constructed of structural steel. Pier 45 was constructed on filled land in 1928 to 1929. In the early 1930s the Municipal Pier at the Aquatic Park was constructed. Simultaneously, another pier was constructed out from the Hyde Street Pier towards the Municipal Pier.

Specific land uses on the pier and along Jefferson Street near the proposed utility alignment are described below:¹⁰

Hyde Street Pier. Historic land uses on the Hyde Street Pier include a fish dealer, two gas stations, a refrigeration company, a U.S. Coast Guard rescue station, a netroom, and a San Francisco State Historical Park. Gateway Shipwright, Harbor Fisheries, and Marine Engine Filters were also located on the pier at one time, but the type of business was not specified for these companies. Currently the pier is used as a park and the Mobil Oil gas station remains.

2905 Hyde Street. A building is located at this address on the Hyde Street Pier. It has been a San Francisco State Historical Monument, and occupied by the Golden Gate Recreational Area, The Maritime Store, and Maritime Programs.

2936 Hyde Street. This address was occupied by Oswald Machine Works from approximately 1948 to 1971 for diesel engine repair. From 1980 to 1995 this address has been used as a fish handling facility by two companies.

¹⁰ Review of San Francisco City directories allowed identification of specific occupants on the pier and along Jefferson Street near the proposed utility alignment. In some cases, the name of the occupant was available, but the type of business was not specified. Although City Directories are available for dates prior to 1953, the earlier directories do not list occupants by address and it is not possible to identify occupants of a specific address. Because of this, actual occupants of a property prior to 1953 could not be identified. In addition, City Directories subsequent to 1970 did not identify occupants on the Hyde Street Pier and the actual end date for certain occupants of the Pier may not be accurately reflected.

Sanborn maps were used to confirm the location of the businesses and to also identify several land uses that were not indicated by review of the City Directories. In many cases, the actual name of the occupant was not included on the Sanborn map.

2941 Hyde Street. This address was occupied by Oswald Machine Works as an engine repair facility beginning in 1974.

500 Jefferson Street. This address was a small building located at the base of Hyde Street, it is no longer present and 500 Jefferson Street is located across Hyde Street to the west. Sanborn maps for 1948 and 1950 indicate that this building was used for painters' storage.

498 Jefferson Street. Land uses at this address from 1953 through the present include restaurants and a gift shop.

496 Jefferson Street. This address has been used as a ship chandlers since 1953.

494 Jefferson Street. Based on the names of the occupants, this address has been used for various office purposes from 1954 through 1989. It has been vacant from 1990 through present. From 1985 through 1987 part of this property was used by Interocean Seafoods and from 1986 to 1989 part was used by France Foods. It is uncertain whether either of these businesses involved fish or food handling.

490 Jefferson Street. This property was occupied by Bell Smoked Fish from approximately 1948 to 1983 as a fish smoking business. Based on the names of businesses located at this property since 1983, it has been used primarily as office space from 1984 through the present. The Greek Fisherman occupied part of the property in 1984. San Francisco Smoked Fish occupied the part of the property in 1987. These businesses may have included fish smoking or fish handling operations.

440 Jefferson Street. This is the same address as Alioto Fish Company (described below), but located to the west. Based on information from Sanborn maps, General Petroleum Resources has operated a large above ground tank at this location from approximately 1948 through 1994. This address is not identified in the City Directories. Additional information identified through review of Port and regulatory agency files indicates that this bulk plant was previously owned by Mobil Oil and that in 1990, General Petroleum Resources was in the process of refurbishing the 200,000 gallon above ground diesel tank. At that time, fuel was being dispensed from an existing

20,000-gallon above ground tank. There was a spill of diesel from overfilling the above ground tanks in 1990. The above ground tanks have been removed and will be reinstalled on this property. Fire Department files indicate that there was also a 2,500-gallon product underground storage tank removed from this site on September 30, 1992. Petroleum related compounds have been identified in the soil and groundwater and a site remediation is underway.

440 Jefferson Street. This property has been occupied by Alioto Fish Company as a fish handling facility from 1957 through the present; the City Directories identified several other fish handling businesses at the property at various times. The Fire Department files include a permit to install a gasoline dispenser dated December 28, 1971. This indicates the potential presence of an underground storage tank, although records do not identify a permitted underground storage tank.

HAZARDOUS MATERIALS SITE ASSESSMENTS AND INVESTIGATIONS

During planning of the previously proposed Fisherman's Wharf Seafood Center in 1989, AGS, Inc. conducted a soil investigation¹¹ under contract to the Port of San Francisco to assess soil quality within the proposed utility alignment. For this investigation, three soil borings were installed and a soil sample from each boring was chemically analyzed for Title 22 metals (including lead) and petroleum hydrocarbons (see Figure 16). The results of the analysis are described in Section IV.H, on pages 164-169.

¹¹ AGS, Inc., 1989. Field Sampling and Chemical Laboratory Testing, Fisherman's Wharf Seafood Center. August 22, 1985.

IV. ENVIRONMENTAL IMPACTS

An application for environmental evaluation for the project was filed on December 28, 1994. an Initial Study of the proposed project was published on May 10, 1994, and it was determined that an Environmental Impact Report (EIR) would be required for the project. Issues determined to require no further discussion as a result of the Initial Study include:

- Land Use -- established community; character of vicinity and Zoning (however, Master Plan Conformity is addressed)
- Visual Quality -- aesthetics; views; glare
- Population -- growth inducement; new employment; demand for new housing, displacement of existing residences or businesses
- Noise -- construction, ambient levels
- Air Quality/Climate -- construction, ambient air quality standards; wind, moisture, temperature, shading (however, odors and boat emissions are addressed)
- Utilities/Public Services -- demand for schools, recreation, other similar public facilities (however, water and sewer are addressed)
- Biology -- scenic trees (however, marine biology is addressed)
- Geology/Topography -- seismic/geologic hazards; unique physical features
- Energy/Natural Resources -- use/depletion of fuel, water or energy
- Cultural -- disruption of archaeological site or property of historic significance (however, a Cultural Resources Mitigation Measure is included as part of the project)

Therefore, the EIR does not discuss these issues, except to orient the reader or address specific sub-topics as required by the Initial Study and noted above. (See Appendix A, page A.1 for the Initial Study.)

Not all of the impacts presented in this section are physical environmental effects as defined in the California Environmental Quality Act (CEQA). Non-physical effects are included for informational purposes only.

The proposed project would not induce substantial growth or concentration of population, although it would likely increase the daily population on the project site. Any potential increase in the visitor population might be noticeable to immediately adjacent neighbors but would not substantially increase the existing area-wide residential population.

As described previously under Objectives of the Project Sponsor, see PROJECT DESCRIPTION, page 1), the proposed project is intended to accommodate existing fishing industry demand, rather than induce growth of the fishing industry in San Francisco. The provision of additional berthing and support facilities at Hyde Street Harbor would not therefore be expected to stimulate substantial additional physical growth in the vicinity. Facilities proposed for Pier 45, Sheds A and C, would be expected to stimulate economic activity in the area, including generation of revenue to help support fishing industry facilities. The increases in visitors and economic activity due to Pier 45 projects would not be expected to induce substantial additional physical growth in the vicinity, nor would it induce substantial population growth in the City.

A. LAND USE, ZONING AND PLANS

Land uses within the project site, and fishing-related uses in particular, would not be substantially altered by the proposed project. The potential to lease dock space to fishing vessels would allow more control of fishing vessels in the harbor and would minimize the number of rafted and double or triple-tied vessels. The truck-based fish-trading activity would not be expected to change due to the project, other than some trucks would relocate to the "valley" area on Pier 45.

Proposed uses on Pier 45 could include activities new to Sheds A and C, but consistent with fishing- and visitor-related activities in the vicinity. These uses would not disrupt or divide the physical arrangement of an established community, nor substantially change the character of the vicinity. The project would require an amendment to the Northeastern Waterfront Area Plan of the Master Plan which designates hotel, commercial office and residential uses on Pier 45. Any physical impacts are discussed in the appropriate subsections of this chapter.

The proposed project is consistent with BCDP policies and the McAteer-Petris Act. Public access would be provided at the Hyde Street Harbor (2,700 sq. ft.), at the work dock (960 sq. ft.), and along the aprons of Pier 45 (35,000 sq. ft.). Proposed new fill in the Bay and Shoreline Band would be water-dependent and would not affect Bay water quality or marine biology as discussed in this report under Maritime Biology Impacts. The proposed Harbor improvements would meet stated objectives of BCDP and the Port for waterfront improvements to support and maintain the commercial fishing industry in San Francisco.

B. WATER QUALITY

Activities which have been identified as potentially causing water quality impacts to the project area and the adjacent Aquatic Park include the following:

- Fish handling and processing activities could generate wastes that, if improperly disposed of, could affect Bay water quality in the project area;
- Potential for fuel spillage and leakage (including bilge water) from the vessels, fueling activities, equipment failure, and maintenance activities that could directly contaminate the Bay;
- Commercial fishing and other vessels, either permanent or transient, could generate human and other wastes (including "floatables") that could be discharged (albeit illegally) to the nearshore Bay waters;
- Potential for pier and boat deck runoff and washdown to be discharged directly to the Bay;
- Litter and trash generated by harbor users and visitors that could be blown offshore or carried by birds to the Bay; and
- Effects of dredging, filling and other construction activities on Bay water quality.

Each of these activities are discussed in terms of their potential to occur as a result of the proposed project and their potential to affect Bay water quality, based on existing and historical water quality conditions. In addition, potential water quality effects of the proposed project that could in turn affect marine biota are discussed in terms of both short-term construction and long-term operation activities.

FISH PROCESSING ACTIVITIES

An area of concern raised by the public regarding the potential effects of the proposed project is the relationship of bacteriological water quality conditions in the harbor and Aquatic Park and the level of fish processing activities. There has been concern that fish processing may include activities such as discharge of fish wastes to the Bay, either through floor drains or through washdown of the pier and aprons, which would thereby affect the water quality. This section discusses the current and historical levels of fish processing activities, available coliform data and statistical evaluations, and general fish processing and fish handling practices.

Fish Landings Data

The Fisherman's Wharf area is an historical and current center for commercial fishing activities, including handling and distribution of fish and other seafood, as discussed previously under PROJECT DESCRIPTION. In 1988, there were 16 commercial fishing companies on Pier 45.¹ Eleven companies, occupying about 80 percent of the renovated Sheds B and D, were operating at the end of 1995. The fish handled at these companies are either brought to the harbor by boat and off-loaded at the Pier, or brought in overland by truck from other ports. Information on fish landings (fish brought in by boats) from the California Department of Fish & Game for the San Francisco Bay area, which includes the major ports of San Francisco, Bodega Bay, Princeton, Oakland and Sausalito, are shown on Tables 1 and 2, in the PROJECT DESCRIPTION, pages 11 and 12. The data show a decrease in fish landings for the area, discussed below, which could be attributed to a number of factors, including a general decline in the industry, a decline in available fish, and an increase in restrictions placed on commercial fishing. One of the restrictions is the "limited entry" (meant to stabilize a declining species) placed on rockfish by the Pacific Fisheries Institute from over 5 million pounds in 1988 to a little over three million pounds in 1993 for rockfish in the Bay Area.² The damage caused by the 1989 Loma Prieta earthquake at the Pier 45 fish processing facilities may have also contributed to the local decrease in fish landings.

Fish landing data specific to the Hyde Street Harbor/Pier 45 project area, based on the database maintained by the California Department of Fish and Game, was estimated by using data for commercial fishing companies leasing space in the harbor in 1988 (prior to the Loma Prieta earthquake) and in 1993. Information on pounds of fish landings in the project area for the two years was compared with the information for two other Bay Area ports (Bodega Bay and Princeton) to ascertain if some commercial fishing activity has relocated from the Hyde Street area to these ports during the seismic retrofit work on Pier 45 and to see if the trend at the Hyde Street Harbor is similar to trends at other Bay area harbors, shown in Table 2, page 12.³

¹ EJM & Associates, 1995. Data collected from California Department of Fish and Game. Fish landing receivers in 1988 included North End Fish Co., Larocca Seafood Inc., Morgan Fish Alioto Fish Co., Blue Pacific Industries, Fisherman's Wharf Seafood, Marine Reef Fisheries, Standard Fisheries Corp., Golden Seas Fisheries, Meatball Bait Distributer, ICM, Alioto Seafood, Caito Fisheries, Long's Fish Company, Monterey Fish Company, and United Shell Fish Company. Fish landing receivers on Pier 45 in 1993 included North End Fish Company, Larocca Seafood, Morgan Fish Co., Golden Seas Fisheries, Meatball Bait Distributer, and ICM.

² California Department of Fish and Game, 1995.

³ EJM & Associates, 1995. Commercial Fish Landing Data for San Francisco Pier 45 based on Landing Receivers for 1988 and 1993 from California Department of Fish and Game data.

The data indicate that the Fisherman's Wharf/Pier 45 project area accounts for about 30 percent of the total fish landing within San Francisco Bay, and the project area experienced about a 60 percent decrease in fish landings (or about 4.9 million pounds) between 1988 and 1993. This can be compared to the overall decrease in fish landings for the San Francisco Bay during this period of about 50 percent (or 11.3 million pounds). Bodega Bay also experienced a reduction in fish landings of about 45 percent or 6.9 million pounds during this same period. Princeton, however, was the only port that experienced an increase during this period, about 0.8 million pounds, which offset the overall San Francisco Bay decrease of 50 percent by only 7 percent. Therefore, it can be assumed that since other ports in the area also experienced a similar decrease in fish landings, the decrease in fish landing poundage received at the Hyde Street Harbor/Pier 45 was apparently due to factors in addition to earthquake-related relocations. Completion of the earthquake improvements at Pier 45 would not be expected to be sufficient incentive for fish landings to return to pre-earthquake levels.

The proposed improved berthing for commercial fishing vessels and improvements to harbor facilities would likely encourage the return of some of the fish handling activities to the Fisherman's Wharf area that relocated following the 1989 earthquake, but as described above, it is unlikely that the level of fish handling activities would return to 1988 levels.

Bacteriological Water Quality

As discussed in the ENVIRONMENTAL SETTING, water quality sampling conducted in May 1995 indicated that total coliform concentrations ranged from 300 to 1600 MPN/100 mL within the Inner and Outer Harbor areas. These levels do not exceed the maximum bacteriological criterion for water contact recreation for a single sampling event, but compliance criteria for bacteriological standards are based on sampling over a thirty-day period. Historical coliform data collected by the Department of Public Works from 1991 to 1992 collected several times per week show a wide range of coliform levels over the course of the year, sometimes meeting the standards and sometimes exceeding the standards. If the standards are exceeded, the City is required to post warning signs at the beaches restricting water-contact sports until the standards are met.

Statistical correlation of the coliform data in Aquatic Park and waterfront locations west of the project area (Presidio and Crissy Field) from 1991 to 1992 indicated a statistically significant correlation of levels of coliform with rainfall data for the previous 24-hour period. However, correlations between coliform levels in the project area (Inner and Outer Lagoons) and rainfall were not statistically significant for the same period. The coliform data at the two westernmost stations also showed a statistically significant relationship with neap tides during the sampling period. No positive correlations were found between coliform data at any stations and fish/crab landings for this period.⁴

There is no indication of a relationship between levels of coliform data in the harbor waters and fish landing data or fish processing activities. Other sources of coliform bacteria are known to be present in the project area, such as wet weather sewer overflows which contain untreated sewage diluted with rainfall and urban runoff. The statistically significant correlation between coliform levels and rainfall at Aquatic Park and other stations west of the project site would support this conclusion. Fish processing and waste handling practices, as discussed below, indicate that no discharges occur to the Bay. There appears to be no direct relationship between fish processing activities and bacteriological water quality. Other sources, such as wet weather sewer overflows to the Bay, appear to be more directly associated with coliform levels.

Fish Processing and Waste Handling Practices

The existing fish processing uses of Sheds B and D are not expected to contribute to water quality degradation because of recently completed improvements to the fish processing areas as well as Health Department regulations for food handling. The seismic repairs at Pier 45 completed in August 1995 include new fish handling facilities, floor drains for washdown water that connect to the City's sanitary sewer, and floor sinks and solids separators in each lease area. The solids separator sinks are connected to a sump, which connect to the six-inch sewer line that is connected to the sewer system. The solids traps in the floor sinks are cleaned regularly and solids are disposed of in trash cans, which are then transported off-site daily to a rendering facility to be made into fishmeal. Fish processing activities primarily take place within

⁴ SOMA Corporation, 1995. Statistical Evaluation, Aquatic park Coliform Data, Hyde Street Harbor EIR, San Francisco, CA. April 7, 1995. Available for review at the Planning Department, 1660 Mission Street, in the project files #93.574E.

the sheds, and not on the apron, so that no fish waste is washed off the apron into the Bay. None of the fish wastes drain or are discharged to the Bay. The fish processing companies are also inspected routinely by the state and local Health Department for sanitary conditions.

Any increased level of fish processing activity that could be associated with improved harbor facilities due to the proposed project would be subject to similar fish handling and waste disposal practices as the existing activities in Sheds B and D. Consequently, with similar to existing practices being utilized, any incremental increase in level of fish processing activity would not be expected to affect Bay water quality.

FUEL SPILLS AND OTHER ACTIVITIES FROM BOATS

There are numerous activities associated with boating, whether commercial or recreation, that can potentially affect water quality. These include potential fuel spills (oil, diesel, and gasoline), bilge pumping (which can contain fuels and heavy metals), garbage and debris thrown or blown overboard, and washdown water from boat maintenance and cleaning.

Fuel spills to the Bay are currently regulated under provisions of the federal Clean Water Act and the California Oil Spill Response Act. Enforcement of these provisions is under the jurisdiction of the U.S. Coast Guard and the California Department of Fish and Game. These agencies as well as the California Regional Water Quality Control Board, and the U.S. Environmental Protection Agency must be notified in the event of any oil or fuel spill (see Appendix B for Oil Spill Notification List). The Coast Guard has enforcement authority over any amount of oil or product that creates a sheen on the water, either from the fuel tank, bilge water or other boat-related sources. In the event of a fuel spill, the Coast Guard's current policy is to send investigators to the scene of the spill to determine the source. If the owner or operator is located, the Coast Guard assesses a civil penalty and requires the owner/operator to clean-up the spill. The Department of Fish and Game also has authority to assess penalties for spills (\$25,000 per incident is the usual fine).⁵ If the source of the spill or the owner/operator cannot be located or the owner/operator cannot clean-up the spill, the Coast Guard would hire a general contractor

⁵ Jones, Roberta, Port of San Francisco, 1995. Memorandum to Dan Hodapp, Port of San Francisco, dated November 16, 1995, regarding Hyde Street Harbor EIR. Available for review at the Planning Department, 1660 Mission Street, in project file #93.574E.

to clean-up the spill and rely on money from an existing pollution fund. Most calls to the Coast Guard in San Francisco Bay are for relatively small spills.⁶ In the past year, there have been fewer than ten reported incidents and all were for minor spills of less than ten gallons.⁷

In the Hyde Street Harbor and Fisherman's Wharf area, the Port of San Francisco maintains a Wharfinger on duty Monday through Friday to oversee boating/berthing activities in the harbor. Problems with fuel spills are usually associated with accidental mishaps, such as a malfunctioning bilge pump or a swamped vessel. The Wharfinger, fisherman or nearby restaurateurs would call the Coast Guard first, if such an event occurs, and then call the Port of San Francisco second (though the Port personnel has no enforcement authority and cannot write citations). In general, the boating activities at the harbor are "self-policing," with the boat owners or operators responsible for reporting spills, and the Wharfinger providing general oversight.⁸ Weekend-use of the harbor is unsupervised. Some dumping from boats may occur.

In addition, Rules and Regulations of the Port of San Francisco for commercial fishing boats, under Terminal Tariffs, Rule No. 34, Section 8C, Item No. 847 states the following:

"No person shall dump or discharge oil, spirits, flammable liquids or contaminated bilge water into any area under the jurisdiction of the San Francisco Port Commission. "

The Wharfinger, under supervision of the Port Director, has authority for enforcement of these regulations and regularly patrols the harbor for these purposes. For fishing vessels with berthing leases, the Port has the authority to terminate their lease, although transient vessels without leases can only be asked to leave. Actual enforcement of water quality violations and penalties associated with fuel spills are under the jurisdiction of the Coast Guard, Department of Fish and Game, and Regional Water Quality Control Board, as previously discussed.

⁶ Chad Corey, U.S. Coast Guard, QM-2, Marine Environmental Response and Petty Officer Chris Mandin, Coast Guard Marine Safety Office. Telephone communication with Joyce Hsiao, Orion Environmental Associates, July 12, 1995.

⁷ Robert Jones, Environmental Specialist, Port of San Francisco, telephone communication with Joyce Hsiao, Orion Environmental Associates, January 12, 1996.

⁸ John Davey, Wharfinger, Port of San Francisco, 1995. Telephone communication with Joyce Hsiao, Orion Environmental Associates, July 12, 1995.

There is also the potential for spills at the fueling dock, which currently exists and is proposed to be maintained at its current location. However, the proposed Harbor Service facilities would include improvements to the existing fuels station building, including lighting and spill containment equipment, a new/replacement fuel delivery pipeline from the seawall to the fuel dock which includes automatic shut-off features, a leak detection system, remote operated shutoff switch and pressure sensitive valves. Oil waste disposal facilities would be constructed in the working area in addition to an existing facility along Fish Alley. The oil disposal/recycling facilities for vessels would be easily accessible for boat operators 24 hours a day with clear signage. These features would help reduce the likelihood of a fuel spill affecting the Bay and would contribute to the long-term improvement of water quality in the Harbor.

However, the possibility of a fuel spill in the Harbor and the fuel would still exist, despite the proposed improvements. The Port currently maintains and would continue to maintain a spill prevention and response plan that specifies procedures to follow in the event of a fuel spill. The plan delineates source identification, clean-up, and notification (including coordination with the U.S. Coast Guard) procedures to contain and minimize any effect of a fuel spill in the Bay. Emergency fuel clean-up equipment is maintained at the fuel dock as well as at the Wharfinger's office and includes absorbent booms (devices about 40-feet long and five inches in diameter filled with absorbent material, used to contain and absorb spills) and absorbent pads.⁹ Dock personnel will continue to be trained in use of equipment, clean-up of fuel spills, and proper disposal of used equipment. Currently, training of personnel consists of attendance at a 24-hour training course, with annual eight-hour refresher courses. In addition, the Port distributed literature to boat owners and operators regarding water quality protection and proper use of the oil disposal/recycling facilities when the recycling shed was completed about two years ago, and the Port will periodically continue this type of public information program.¹⁰

The proposed project is not expected to attract substantially increased numbers of boats over existing numbers of boats, thus, the proposed project would not result in any increased potential

⁹ John Davey, Wharfinger, Port of San Francisco, 1995. Telephone communication with Joyce Hsiao, Orion Environmental Associates, August 18, 1995.

¹⁰ Roberta Jones, Environmental Specialist, Port of San Francisco, telephone communication with Joyce Hsiao, Orion Environmental Associates, January 12, 1996.

for fuel or oil spills from fishing vessels over that which currently exists. The proposed project is designed to provide adequate facilities to accommodate the existing number of vessels using the harbor by providing berthing space for boats now rafted or double-tied in the harbor, and the Port will continue its existing programs and practices to minimize fuel spills to the Bay and harbor. The project would include improvements at the existing fuel dock which would reduce the potential for fuel spills in the Harbor associated with the fuel dock.

OTHER WASTES FROM BOATS

As in any port or harbor, there is the potential for illegal dumping of wastes by boats in the area. The Port of San Francisco Rules and Regulations for commercial fishing vessels includes the following provision under Item No. 847:

"No person shall throw, discharge or deposit from any vessel or from the shore or float or otherwise any kind of refuse or sewage whatsoever into or upon the waters of the harbor, or in, on or upon the banks, walls, sidewalks, or beaches of any waters within the jurisdiction of the San Francisco Port Commission. All garbage must be removed from the area."

The Wharfinger, under supervision of the Port Director, has authority for enforcement of these regulations and regularly patrols the harbor for these purposes. For fishing vessels with berthing leases, the Port has the authority to terminate their lease, although transient vessels without leases can only be asked to leave. Actual enforcement of water quality violations associated with discharge of refuse or sewage to the harbor waters is under the jurisdiction of Regional Water Quality Control Board. According to the Port's Wharfinger, none of the commercial fishing boats are permitted to have bathroom facilities that can discharge to the water. The boats must have fully contained chemical toilets, similar to those used in a Recreational Vehicle (RV). The Wharfinger regularly patrols and monitors the vessels in the Harbor to assure that these requirements are met. The Hyde Street Harbor does not currently have a pump-out station for the chemical toilets, and vessels must go to Gashouse Cove or Pier 39 for those

facilities.¹¹

The proposed project is not anticipated to generate an increase in the number of vessels using the harbor, and therefore, no increase would occur in potential for waste discharge from boats than currently exists. The potential for such discharges would, in fact, be reduced due to the proposed vessel sewage pump-out station. The station would be located adjacent to the fuel dock area with a 20 gallon per minute pump-out capacity directly connected to the City's sanitary sewer system. In addition, the new sewage handling facilities with the proposed project would be a convenience for the commercial fishermen and would reduce the likelihood of illegal discharges to the Bay, which would indirectly protect water quality in the Bay.

Although the proposed project would not result in any increased potential for waste discharge from boats, there are additional procedures the Port could implement to minimize the likelihood of illegal discharge of wastes to harbor waters and to assure that waste disposal facilities are properly used. This could include increasing the coverage (24 hours/day) of supervision and oversight of commercial boating and berthing activities at the proposed harbor.

STORMWATER

The Hyde Street Pier and Pier 45 are located along the City's perimeter, and stormwater runoff from the piers and work dock area does not flow to the City's combined sewer system. The project area instead drains to catch basins that discharge directly to the Bay. Part of the recently completed post-earthquake improvements included installation of two 4,000 gallon oil/water separators located under the paved surface of Pier 45 between Sheds A and C for stormwater runoff. Runoff from the shed roofs and parking area is directed to the valley between the sheds, then flows to the oil/water separators for treatment, prior to discharge to the Bay. These improvements have provided additional water quality protection to the harbor from pre-earthquake conditions. Proposed improvements to Sheds A and C would be interior improvements and would result in no change in water quality conditions and no increase in the existing area of impermeable surface. Runoff from the aprons on the east and west side of Pier

¹¹ John Davey, Wharfinger, Port of San Francisco, 1995. Telephone communication with Joyce Hsiao, Orion Environmental Associates, July 12, 1995

45 will continue to flow directly to the Bay.

The proposed project would result in an increase in impermeable surfaces, associated primarily with the floating berths and walkways, and stormwater runoff from these surfaces would drain directly to the Harbor. The estimated increase in impermeable surfaces associated with the floating berths and walkways would not affect the existing combined stormwater/sewer collection system. Stormwater runoff on the Hyde Street Pier would be collected in the depressed central area on the pier and would flow to an oil-water separator. Water quality effects associated with discharge of stormwater to the Bay would not be expected to change substantially from the existing conditions.

In addition, runoff from the breakwater, either from stormwater or wave action, drains accumulated debris, animal wastes, and sediments into the Bay. The San Francisco Fire Department has used the fireboat at Pier 22 1/2 periodically as requested by the Port to hose off the breakwater during outgoing tides so that debris and wastes are dispersed into the Bay at large. This practice is conducted only as requested by the Port and approved by the Fire Department.¹²

LITTER AND TRASH

Litter and trash floating in the harbor waters is a common water quality concern in the project area. The litter can either be blown by the wind or carried by sea gulls from the adjacent restaurants and tourist shops, from the fishing vessels, or from the fish processing industries. The Port of San Francisco operates a work skiff one to two hours a day in the harbor to clean up the floating debris. Implementation of the proposed project would not be expected to affect the amount of litter or trash carried to the Bay, since the number of boats are not expected to increase and trash containers would be provided on the new marina docks and at the fueling dock. Although the proposed project would not result in any increased potential for litter or trash, the Port could implement measures to improve the existing water quality conditions, such as: (1) Increasing the frequency of the Port's work skiff operation could provide an incremental

¹² Captain John Peeff, San Francisco Fire Department, Captain of Fireboat at Pier 22 1/2. Telephone communication with Joyce Hsiao, Orion Environmental Associates, March 25, 1996.

improvement in water quality and aesthetics of the harbor waters, and (2) Coordinating with restaurant owners and nearby commercial operators to improve housekeeping practices (such as improved grease disposal bins, dumpsters with side covers, increased cover garbage receptacles, sidewalk sweeping, etc.) to reduce litter and trash entering harbor waters.

CONSTRUCTION IMPACTS

Construction of the proposed harbor improvements to the pier and berthing system would require removal of a portion of the existing pier structure, replacement of rock, installation of new concrete piles, installation of guide piles and installation of floating berths and walkways. These activities would involve dredging about 20,000 cubic yards of bottom sediments and placement of fill in the construction areas, and would disturb Bay sediments in the project area. Dredging, if required, would occur on a 24-hour basis.

Dredging and placement of fill/rock materials in the Bay would be expected to result in short term, localized effects to the Bay water quality. These effects could include lower dissolved oxygen, increased turbidity and salinity, increased concentration of suspended solids, and possible release of chemicals present in the sediments into the water column. Due to the circulation and tidal effects of water flow in the harbor, the affected water would be expected to be dispersed and thus diluted to the Bay at large following completion of construction activities that would disturb Bay sediments.

Any dredging would be conducted under permit conditions required by the U.S. Army Corps of Engineers and the Bay Conservation and Development Commission, which includes water quality certification by the Regional Water Quality Control Board that is designed to protect water quality; the State Lands Commission may also have regulatory approval over dredging activities. These permit conditions include sediment testing prior to dredging to determine if the quality is suitable for in-Bay disposal. All dredging conducted to date by the Port has met these requirements. If the regulatory agencies determine that additional water quality protection is warranted, measures such as silt screens may be required during dredging, but to date this

measure has not been necessary. In addition, the Port schedules any dredging activities to avoid conflicts with the herring season or with special activities at the swimming clubs.¹³

As discussed under III. ENVIRONMENTAL SETTING, B. WATER QUALITY, Page 43, the quality of sediments in the project area is generally comparable to that in other parts of the Bay. Therefore, effects of temporary sediment disturbance in the project area to the water quality would be within the range of water quality effects experienced during the recent maintenance dredging in April of 1995. That maintenance dredging operation lasted five to six days and involved removal of about 17,000 cubic yards of sediment. No water quality conditions were imposed on that dredging operation by the Corps of Engineers permit or the Regional Water Quality Control Board review. The Port received no complaints related to the dredging activity. In response to a request by swimmers at Aquatic Park, no dredging activities were conducted on Saturday.¹⁴

Construction activities in the Bay, such as placement of fill and rock materials, removal of existing piles, and installation of concrete piles would result in temporary, localized increases in turbidity and suspended solids, and decreases in dissolved oxygen. These effects would be minimized by compliance with water quality conditions proposed by the Port and included in construction specifications. These measures would be implemented as part of the Port's Best Management Practices for improving water quality. These measures would include field inspection during construction for visual observation of water quality and, if necessary, field sampling for turbidity. Similar to dredging activities, the Port would schedule in-Bay construction activities to avoid conflicts with the herring season and the special activities of the swimming clubs.

Removal of existing piles required for pier reconstruction would result in dislodging of debris, particles, and fine sediments attached to the piles and releasing them into the Bay. This would temporarily increase suspended solids and turbidity in the harbor waters that could be transported to Aquatic Park. Use of temporary cloths to wrap the piles prior to pulling them

¹³ Roberta Jones, Environmental Specialist, Port of San Francisco,*telephone communication with Joyce Hsiao, Orion Environmental Associates, January 12, 19996.

¹⁴ Jones, Roberta, Port of San Francisco, 1995. Telephone communication with Marilyn Duffey, The Duffey Company, August 24, 1995.

would reduce the release of particles to the Bay, and use of booms could minimize the potential for transport of particles to adjacent areas. See Best Management Practices, Chapter V., page 165.

C. MARINE BIOLOGY

POTENTIAL EFFECTS ON MARINE BIOTA

This section summarizes analysis prepared by MEC Analytical Systems, which is included in the Water Quality Technical Report; available at the Department of City Planning, 1660 Mission Street.

Reconstruction of the Hyde Street pier would include removal of some existing rock and timber and placement of new rock and concrete fill, which would result in loss of habitat for some species and a gain in potential habitat for others. Habitat loss would include the removed substrate that would be buried by fill, while new habitat would be created for settlement of hard-bottom species that would attach to the new rock fill. Organisms living on the submerged portions of the pier would be subject to burial from dredging, but these organisms are common in adjacent areas and would likely recolonize the area following completion of construction. Sessile (permanently fixed) organisms growing on timber and rocks would be lost during the reconstruction of the east side of Hyde Street pier. Sedentary (fixed in one location) and infaunal (living within the sediment) species would also be lost, and motile organisms would be displaced to other locations. These organisms comprise the food of many demersal (living near the bottom) fish and their loss would result in short-term loss of food organisms for some fish living in the harbor.

An estimated 0.16 acres of rock and timber would be removed; however, 0.43 acres of rock and concrete would be gained, resulting in a net increase of 0.27 acres of new substrate. Similarly, the 65 new concrete piling supporting the proposed harbor would provide additional substrate for colonization by intertidal organisms. The losses of benthic habitat would be short-term due to proposed replacement of alternative substrate material.

Dredging about 20,000 cubic yards of bottom sediments would result in the direct loss of soft-bottom, benthic habitat, and would also result in short-term increases in turbidity that could indirectly affect marine organisms. Turbidity from dredging would reduce light availability and thus photosynthetic activity of phytoplankton. Zooplankton near the turbid area may be subjected to interference with feeding behavior. Increases in turbidity can also affect filter-feeding organisms by impairing respiration and feeding. If turbidity is severe and prolonged, sedentary organisms may

be buried by suspended sediments. Fish exposed to suspended sediment in the laboratory have been shown to suffer mortality as well as sublethal signs of stress.¹ However, fish have the ability to move and avoid the area in response to sediment turbidity. Adult fish would likely escape from areas of high turbidity and continue to avoid the area as long as sediment suspension persists.

Some avoidance of the project area by marine mammals would be likely during construction, particularly if pile driving is required. However, the incremental increase in noise level is not expected to affect seals and sea lions in the project area. Fishing vessel traffic can induce stress for seals and sea lions due to the potential for incidental harassment of and collisions with marine mammals. However, in general, it is expected that these animals would avoid the boats. No long-term changes in effects of fishing vessels is expected. The floating docks could provide new haul out spots for sea lions, as has occurred at Pier 39 Marina. Docks occupied by boats, with human activity, would not be likely to attract sea lion use. Unoccupied docks could. If unoccupied docks were to be used by sea lions and if this were to attract larger numbers of marine mammals to the harbor area than now exist, bacteriological water quality could be effected. It is not possible to accurately quantify this speculative condition.

¹ O'Connor, J.M., D.A. Newman, and J.A. Sheik Jr., 1977. Sublethal effects of suspended sediments on estuarine fish. Technical paper, U.S. Army Coast Eng. Res. Center (No. 77-3):90.

D. PUBLIC UTILITIES

SEWER AND STORMWATER SERVICES

The sewage collection system in the project area includes a new six-inch sewer line along Pier 45 (installed as part of the FEMA grant upgrades), which connects to the 51-inch line along Jefferson Street. The proposed project is broken into the following components:

- the Hyde Street Harbor pier reconstruction and Marina would include an oil-water separator for storm water, which would connect to the sewage collection system.
- the Harbor Service Facilities would add one restroom near the fueling area for the boat operators and fishermen, and a new vessel pump-out station. Currently, there is no vessel pump-out capability available.¹ This would be connected to the City sewer system.
- Pier 45 Sheds A and C improvements, which would incorporate a 25,000-square foot visitor center with a food service area; a 20,000-square foot conference center with a catering kitchen and restrooms; 40,000 square-feet of retail space; 10,000 square-feet of office space; and 45,000 square-feet of outdoor public access space.

The six-inch existing sewer main and pump station at Pier 45 were designed for existing uses of the Sheds A and C (parking and special events), but may not be able to accommodate the peak loads from the Pier 45 proposed improvements.^{2,3} Wastewater generated by the proposed visitor center, conference center, retail uses, and office use would likely be beyond the capacity of the existing six-inch sewer main in Pier 45. During preliminary design of proposed improvements in Sheds A and C on Pier 45, the project sponsor would prepare engineering estimates of wastewater loads and peaking factors to determine the adequacy of the six-inch sewer main on Pier 45. The Port would coordinate with the Department of Public Works to establish the need for pipe upgrade replacement and would implement the resulting recommendations.

¹ Personal interview, John Davies, Wharfinger, June 16, 1995.

² Personal communication with Dan Hodapp, Port of San Francisco, June 19, 1995.

³ Telephone conversation with Amy Carpenter, Moffatt and Nichol, June 12, 1995.

The City Water Pollution Control Plant treatment facilities have been designed to handle demands from both wet and dry weather flows. The existing wastewater treatment facilities and discharge outfall have adequate capacity to accommodate any dry weather flows generated by the proposed project.

Stormwater runoff from Fish Alley, the existing piers and aprons and buildings currently drains directly into the Bay. Runoff from Pier 45 is collected and treated in an oil/water separator located in the valley between the sheds before discharge to the Bay.⁴ Connection of the existing drains along Fish Alley to an oil/water separator would reduce the occurrences of untreated discharge to the Bay. The proposed project would also include an oil/water separator in the Harbor Facility area near the fuel dock.

If the proposed project is implemented, an increase in impermeable surface areas, associated primarily with the floating berths and walkways, would occur. Stormwater runoff from these surfaces would drain directly to the Harbor. The estimated increase in impermeable surfaces associated with the floating berths and walkways would not affect the existing combined stormwater/sewer collection system.

WATER SUPPLY SERVICES

According to the San Francisco Water Department⁵, existing mains and water supply pipes would be adequate to serve new development associated with the proposed project. Water demand would be associated with the commercial eating uses (in the conference center and visitors center), the office spaces, and the landscaping. The project area is served by dual supply (from Taylor Street and from the Embarcadero) and has adequate capacity to serve the proposed project.⁶

An existing master water meter is at the Pier. New pier tenants would apply for individual meters with the Customer Service Department of the Water Department.⁷ In compliance with San Francisco Ordinances 392-90 and 92-91, the project sponsor would incorporate as many water conservation devices into the project and landscaping as possible. Typical conservation devices include low-flow toilets, drought-tolerant plants and drip irrigation.

⁴ Chief Building Inspector, Ed Bubnis, Port of San Francisco, Personal interview, June 12, 1995.

⁵ Denise Davilla, San Francisco Water Department, Distribution Division, Personal Communication, June 19, 1995.

⁶ Ibid.

⁷ Ibid.

E. PUBLIC SERVICES

POLICE SERVICES

The additional visitor and employee activity associated with the proposed project (particularly Sheds A and C on Pier 45) would increase the potential for additional crime and vandalism in the project area and could, in turn, increase calls for police services. The incremental increase in demands for police services could be accommodated to some extent by the existing police force, although crime prevention measures would be required to minimize the additional demands for police services.

To reduce demands for police services, the shed tenants could hire additional security guards for foot patrols in the project area. The project sponsor would implement a crime prevention education program for merchants and staff. The project final design would include security measures to deter crime. These measures may include: restricting access to harbor area, alarms, closed circuit television, and/or a security system.

FIRE PROTECTION SERVICES

The number of fire and non-fire related incidents and the need for fire protection services would be expected to increase in proportion to the net new employees, visitors, and traffic associated with implementation of the proposed project.

The proposed project, primarily the Sheds A and C improvements, would result in the potential for increased demands for fire protection services by both the San Francisco Fire Department and the Port. No increased demands for fire protection services by the U.S. Coast Guard would be anticipated since the number of fishing vessels and level of activity at sea would remain about the same as current levels.

At the proposed Hyde Street Harbor Marina, demands for fire protection services could be decreased from current levels due to proposed infrastructure improvements, including lighting and electrical power improvements. In addition, the proposed improvements to the fuel dock and fuel delivery system would also decrease the potential demands for fire services.

At Pier 45, the Sheds A and C proposed improvements of approximately 140,000 square feet of floor area would generate new employees, visitors and traffic to the project site. This increased level of activity would be expected to increase the demands for fire protection services, although compliance with local building regulations regarding fire protection, fire spread control, and access would be expected to minimize any additional demands for fire protection services by the San Francisco Fire Department and the Port. Existing levels of staffing and equipment at the San Francisco Fire Department and the Port Fire Marshal would be expected to be adequate to accommodate any incremental increase in demands for their services.

The current water distribution system (both City and Auxiliary Water Supply System) would be adequate to accommodate the proposed project.¹ However, project specific fire suppression measures would need to be added, at the direction of the Fire Department. These measures would include a minimum of two additional suction pumps at Pier 45 Sheds A and C and sprinkler systems in the sheds. Additional measures might include: dry and wet standpipe outlets; additional fire alarm call boxes; automatic fire suppressant equipment for the floating marine diesel fuel depot; signage for egress; and provisions for fire lanes and curb markings. The Fire Department would require installation of low and high pressure hydrants, to meet fire department regulations.²

¹ Steven I. Van Dyke, Superintendent, San Francisco Fire Department, Bureau of Engineering and Water Supply, Personal interview, June 16, 1995.

² Ibid.

F. AIR QUALITY

Based on the Initial Study (see Appendix A, page A.21) and the Transportation Section of this EIR, the proposed project would not generate sufficient vehicular traffic to warrant analysis of potential air quality effects from motor vehicle emissions, such as localized effects on carbon monoxide or regional effects to the air quality in the Bay Area Air Basin. The Initial Study has also indicated that demolition and construction activities would not raise dust levels to a level that would have significant impacts upon air quality. In addition, although air pollutant emissions are associated with marine vessels (discussed in the Initial Study, page A.21), the proposed project is not anticipated to result in any change in existing levels of marine vessel activity since the proposed project is designed to accommodate the existing level of vessel usage in the harbor. Thus, no changes in regional air quality emissions from marine vessels would be expected from the proposed project. Therefore, these topics are not discussed in this section. This section focuses on air quality effects associated with odor emissions from fish processing activities on Pier 45, along Fish Alley, and around the boats in the harbor due to concerns raised by the public to the Port.

FISH PROCESSING ODOR

Odor and the fishing industry are inextricably linked together. A major source of unpleasant odor is from the anaerobic (oxygen deficient) decomposition of nitro-organic compounds. Fish processing industries, similar to sewage plants, feed lots, and rendering plants, are typical examples of odor sources due to the presence of relatively large amount of nitro-organic compounds. Most fish and other marine organisms do not contain a high surplus of oxygen in their systems, and therefore they are susceptible to rapid spoilage when exposed to air. Compounding this problem is that the breakdown of fat in fish (fish oil) leads to the formation of dimethyl amine, which is the major source of "fishy" odor. Odor tendency varies among various marine species due to their differences in fish oil content and susceptibility to bacterial decomposition. Cold temperatures markedly slow the bacterial breakdown process and placing the marine species on ice can reduce the odors generated. Odors of a more putrescent character may develop rapidly when marine life tissue begins to decompose, but fish odor in itself is not necessarily an indication of any unhealthful state of the product.

Odor nuisance is a subjective phenomenon. The Fisherman's Wharf area often smells fishy, which could be considered to lend character to the area, and the odor may not necessarily be perceived as objectionable. If the fish odor were intense, or if the odor character became septic or putrid, the same odor becomes nauseating unless olfactory sensitivity has been reduced from extended exposure to the odor.

Because odor can be the result of a complex mix of organic and inorganic chemicals, and because secondary factors can affect perception (such as odor strength and character, a person's previous association with the odor, a person's age and gender, etc.), no completely objective, quantitative mechanism exists for odor measurement. The most common odor descriptor is a parameter called an "odor unit" (OU). The number of OU's in an air sample is equal to the number of dilutions with clean air needed to reduce the odor strength until fewer than one-half of people with normal olfactory acuity cannot smell the odor any longer. This parameter may also be called the dilution-to-threshold (D/T) odor strength. It relates only to odor intensity, and not to character. A rule of thumb is that 5 D/T is the threshold for unpleasant odor that begins to evoke nuisance complaint among the more sensitive observers (generally women are more sensitive than men). At 10 D/T, the complaining percentage noticeably rises.

Odor complaints in Aquatic Park have been voiced to the Port regarding odors reportedly emanating from the vicinity of the fish processing activities on Pier 45 and from boats in the harbor (see Initial Study, Appendix A), although no odor complaints have been reported to the Bay Area Air Quality Management District.¹ Some complaints suggest that offensive odors are more associated with foul odors of a septic or putrid nature than simple "fishy" odor. The worst odors are described as having a sewage character as opposed to a more fresh fish odor and are described as "not all that frequent."²

Such odors may have been associated with existing fish processing along Fish Alley, or former fish processing in Sheds B and D on Pier 45, but the odors could also derive from other

¹ Telephone communication with Jim Ting, Area Inspector, Bay Area Air Quality Management District, with Evelyn Shellenberg, Orion Environmental Associates on January 12, 1996.

² Odor Survey conducted by Orion Environmental Associates, May 1995.

sources, such as stormwater catch basins or the combined sewer system. If the odor is from existing fish processing activities, it is more likely due to an upset in the processing stream, such as a clogged sewer or opened vents on waste storage, rather than from standard operating procedures. However, any odors currently emanating from existing fish processing activities in Sheds B and D would be expected to be reduced from pre-earthquake levels due to the recently completed (August 1995) improvements associated with repairs of earthquake damage. Improvements in existing operations may allow for any increased volume of fish processing activities associated with the proposed project without generating any additional odors, since sources of possible odor have been replaced. These could include replacement of inadequately sized storage, sewers or drainage/washdown facilities; improved materials such as stainless steel or ceramics, that are more easily sanitized; improved refrigeration/freezing; and improved clean-up facilities.

An odor survey was conducted in the vicinity of the Hyde Street Harbor and Pier 45 on May 3, 1995 in mid-afternoon and repeated at 5:30 AM on May 11, 1995. A syringe dilution apparatus described in American Society of Testing Materials Standard Method D-1391 was used by a trained observer to evaluate odor strength. During the first survey, in the afternoon, there were moderate winds and little activity on the pier; odors were transitory and not strong enough to measure. Faint fish odor and a diesel oil odor were detected near a fishing boat berthed in the Inner Lagoon, but not at any measurable level. During the second survey in the early morning, the winds were lighter and activity levels were higher. Odors were not detected at Aquatic Park because winds were from the west at one to two miles per hour. Fish odor was detectable at a distance of 250 feet downwind of Fish Alley. No odor was detected on Pier 45 itself, except for brief "whiffs" too weak and too infrequent to be measured. A maximum odor level of 10 D/T was observed near the rear door of a truck parked on Leavenworth Street, which was loading fish packed in ice. The odor was not detectable more than a few feet away.

As observed during the odor survey, odor nuisance in the Aquatic Park area would be influenced by the prevailing wind direction. Wind records from the downtown San Francisco wind monitoring station operated by the U.S. Weather Bureau indicate the following wind direction frequency:

<u>Wind Speed (miles per hour)</u>	<u>Wind Direction (from)</u>	<u>Percentage of Occurrence (%)</u>
Light (<3 mph)	NE, ENE, E	2.5%
Moderate (4-11 mph)	NE, ENE, E	5.3%
Strong (>11 mph)	NE, ENE, E	0.6%
Light (<3 mph)	SW, WSW, W	4.1%
Moderate (4-11 mph)	SW, WSW, W	11.9%
Strong (>11 mph)	SW, WSW, W	13.2%

The Aquatic Park is located west and southwest of the harbor and Pier 45. The predominant wind direction is from the west, southwest, or west southwest, which is in the direction going from Aquatic Park towards the pier. When the predominant winds are blowing, odors from the fish processing and harbor activities would be carried away from Aquatic Park. This wind direction occurs more than three times more frequently than from the reverse direction. The frequency of light winds, when odors would be least dispersed, from the direction of the pier and harbor toward Aquatic Park occur about 2.5 percent of the time, or about 4 hours per week, usually in the middle of the night or very early in the morning, and especially in winter when recreational users at Aquatic Park are limited.

Therefore, it is unlikely that any increased level of fish processing activities associated with the proposed project would result in a noticeable increase in "fish" odors in the project area, particularly in Aquatic Park. In addition, the proposed project would not be expected to result in any increased odors associated with boating and vessel activity, such as diesel fumes, since the project would be designed to accommodate the existing level of boating activity and no increase in number of boats is anticipated.

The Bay Area Air Quality Management District nuisance rule prohibits odor nuisance. If five different individuals were to make separate odor complaints on a single day due to fish processing activities and the complaints are confirmed by an inspector, it would be considered a public nuisance. The Air District would then initiate action with the fish processing operators to reduce the source of odors.

G. TRANSPORTATION

The information in this section is derived from the *Hyde Street Harbor/Pier 45 Transportation Analysis* prepared by KORVE Engineering, Inc. in consultation with the City Planning Department, dated October 1995. A copy of that report is on file and available for public review at the City Planning Department, located at 1660 Mission Street, 5th floor.

TRAVEL DEMAND

Project travel demand refers to total new vehicle, transit and pedestrian traffic generated by the proposed project. This section provides an estimate of potential travel demand to be generated by the proposed Hyde Street Harbor/Pier 45 Project.

Trip Generation

Table 9 presents the total person-trip generation for the proposed land uses on Pier 45 for the Proposed Project. The number of person trips generated by the project is presented, as are the net new project trips. Based on surveys conducted at Fisherman's Wharf as part of the *Northern Waterfront Transportation Study*, 1987 and the *Underwater World Aquarium at Pier 39*, 1989, an estimated 70 percent of the total retail, conference center and visitor center trips generated by the facility would be linked trips. Linked trips would include those visitors already coming to Fisherman's Wharf who add the proposed project to their itinerary, and those who decrease the number or duration of visits to other attractions.

The person-trip generation for the proposed project was based on information obtained from a number of sources. Sources included the *Guidelines for Environmental Review: Transportation Impacts*, July 1991, *Citywide Travel Behavior Survey*, 1993, and the *Northern Waterfront Traffic and Transportation Study*, 1987.

Trip Distribution and Mode Split

Mode split and distribution information for retail, office and cultural (conference and visitor center) trips was obtained from the *Citywide Travel Behavior Survey, Employees and Employers*, May 1993 and information obtained from the Department of City Planning. Assignments to travel

modes for the project were made based on this mode split information.

Table 10 presents the *net* trip generation by mode for the peak periods. This table presents the number of vehicles generated by the proposed project, and thus accounts for single-occupancy and shared-ride vehicles, as well as the number of transit, walk and "other" trips. Other trips include those visitors that use bicycles, motorcycles or other modes.

Hyde Street Harbor: Minor improvements are proposed for the Hyde Street Harbor, and the new facilities such as the pump-out station and the restrooms would support the existing commercial fishing uses in the harbor. The provision of the additional berths in the harbor would improve an existing "double-stack" berthing condition.

The number of parking spaces at the Hyde Street Harbor would increase over the number of spaces that currently exist, and the spaces would be used by the existing users of the Harbor. Since the existing users of the Harbor already park at off-street lots and on-street in the vicinity of the Harbor, it is not anticipated that the improvements at the Harbor would result in an increase in the number of vehicle trips to the Harbor. Existing and future trips to the Harbor are already included as part of the existing traffic volumes and operating conditions in the study area.

Pier 45: The proposed project, the Fisheries Center, would generate a total of 58 vehicle-trips during the weekday AM peak hour, 81 vehicle-trips during the weekday PM peak hour, and 98 vehicle-trips during the weekend midday peak hour.

Vehicle trips were assigned to the roadway network using the distribution information for retail, office and cultural trips from CTBS. The majority of the trips (60 percent of the cultural use and 40 percent of the retail use) would be made from locations within San Francisco. Approximately 35 percent of the retail trips and 18 percent of the cultural trips would be from out of the region. These distribution patterns were used as the basis for assigning the project vehicle trips to the local streets in the study area.

Table 9
Person-Trip Generation

Use	Size (gsf)	Daily Person-Trips	Weekday		Weekend Midday
			AM	PM	
Total Project Trips					
Visitors Center	25,000	6,384	0	609	609
Conference Center	20,000	3,480	418	278	661
Retail	40,000	6,000	726	726	726
Office	10,000	181	15	15	2
Total Project Trips		16,045	1,159	1,628	1,998
Net New Trips					
Visitors Center	25,000	1,915	0	183	183
Conference Center	20,000	1,044	125	83	198
Retail	40,000	1,800	218	218	218
Office	10,000	181	15	15	2
Net New Trips		4,940	358	499	601

Table 10
Project-Generated Trips by Mode

Travel Mode	Weekday AM	Weekday PM	Weekend Midday
Auto ¹	58	81	98
Transit	75	110	133
Walk	119	164	202
Other	35	44	51

Notes:

(1) Represents vehicle trips. Person-trips using auto as a travel mode were adjusted by vehicle occupancy rates reported in the City Travel Behavior Survey data to estimate number of vehicle trips.

Source: Kolve Engineering, Inc.

TRAFFIC OPERATING CONDITIONS

Impacts of the proposed project were assessed for the five intersections in the vicinity of the proposed project. Traffic counts conducted in February 1995 were used as the basis of analysis. Sensitivity analyses using July 1995 traffic counts were conducted at key intersections to determine if the February conditions were substantially different from summer conditions. The analysis results indicate that the LOS operating conditions would remain similar under both the winter (February) and summer (July) conditions. Under existing conditions the five study intersections currently operate at LOS B or better during the weekday AM and PM peak hours, and the weekend midday peak hour.

As defined by the City and County of San Francisco, the operational impact of an intersection is considered significant when project traffic causes the Level of Service to deteriorate from LOS D to LOS E. Refer to Appendix D for detailed description of the LOS designations for intersections.

The analysis considers two scenarios (Existing Plus Project and Cumulative Year 2010) and three different peak hours (weekday AM, weekday PM, and weekend midday). Tables 11 and 12 present the results of the Existing Plus Project and Cumulative analyses for the weekday and weekend peak hour conditions, respectively.

Existing Plus Project Traffic Operating Conditions

With the Proposed Project, traffic operating conditions at the five study intersections would remain essentially unchanged. Under all conditions, all intersections would operate at Level of Service B or better. The intersection of Jefferson Street/ Powell Street/The Embarcadero would operate at level of Service C in the future with the proposed project and cumulative conditions. The Proposed Project would not cause the Level of Service to degrade to an unacceptable Level of Service E or F during the weekday AM or PM peak hours, nor during the weekend midday peak hour.

Table 11
Intersection Level of Service -Weekday Conditions

Intersection	Existing (1995)				Existing (1995) Plus Project				Cumulative (Year 2010) Existing Roadway Network				Cumulative (Year 2010) Revised Roadway Network			
	AM		PM		AM		PM		AM		PM		AM		PM	
	Delay*	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Jefferson/Taylor	7.9	B	8.2	B	7.8	B	8.0	B	7.5	B	8.0	B	7.4	B	8.4	B
Jefferson/Powell/ The Embarcadero	12.0	B	12.3	B	12.2	B	12.5	B	11.6	B	11.7	B	11.3	B	11.6	B
Beach/Taylor	7.3	B	7.4	B	7.3	B	7.4	B	7.4	B	7.5	B	7.4	B	7.7	B
Beach/Hyde	5.9	B	8.0	B	6.0	B	7.9	B	6.0	B	8.1	B	5.9	B	8.3	B
Powell/Beach	2.8**	A	3.3	A	2.9	A	3.6	A	7.1	B	6.0	B	6.9	B	6.7	B

Table 12
Intersection Level of Service - Weekend Midday Peak Hour Conditions

Intersection	Existing (1995)		Existing (1995) Plus Project		Cumulative (Year 2010) Existing Roadway Network		Cumulative (Year 2010) Revised Roadway Network	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Jefferson/Taylor	10.2	B	10.1	B	9.9	B	9.7	B
Jefferson/Powell/The Embarcadero	14.2	B	14.5	B	20.1	C	13.1	B
Beach/Taylor	7.8	B	7.8	B	8.0	B	8.6	B
Beach/Hyde	8.2	B	8.2	B	8.4	B	8.5	B
Powell/Beach	7.4**	B	8.1	B	8.8	B	8.4	B

* Delay calculated as seconds per vehicle

** Three-way STOP-controlled intersection under existing conditions only

Source: Korve Engineering, Inc.

Cumulative (Including Project) Conditions

For the future (Year 2010) cumulative intersection analysis, existing traffic volumes were adjusted based on compound annual growth rates of between 0.8 and 1.5 percent (12.7 to 25% over 15 years). These rates are also used in the ongoing *San Francisco Waterfront Land Use Plan EIR* and are based on anticipated future year traffic volumes at intersections along the Embarcadero, as identified in the *Alternatives to Replacement of the Embarcadero Freeway and the Terminal Separator Structure EIS/EIR*. The traffic volumes used as part of the Embarcadero/Terminal Separator Structure effort were developed as part of a two-step process, including identification of future traffic growth in downtown San Francisco through the use of the regional MTC travel demand model, and a more refined assignment of vehicle trips to the street network.

Under future cumulative conditions, it is anticipated that the fish handling space at Sheds B and D would become fully occupied. Activities associated with these operations include early morning (4:30 AM to 11:00 AM) fishing, and late morning to mid-afternoon processing, clean-up and trading (11:00 AM to 2:00 PM). For the most part, these activities would not coincide with the peak period of activity for the Proposed Project.

Cumulative conditions were analyzed for two roadway configuration scenarios: the existing roadway configuration, and a revised roadway configuration on Taylor and The Embarcadero proposed by the Port of San Francisco.

Existing Roadway Configuration: This scenario assumes that the roadway configuration is essentially the same as it is today, with the exception of the Pier 39 garage improvements and the construction of the MUNI F-Market line. The proposed improvements to the Pier 39 garage would not cause the traffic Levels of Service to degrade the operations of the intersections of Beach and Powell Street nor Jefferson/Powell/The Embarcadero. The improvements would result in a decrease in the number of vehicles approaching these intersections.

The operation of the MUNI F-Market line would also not cause traffic operations to degrade to an unacceptable Level of Service. The operations of the street car were incorporated into the

analysis for the study intersections of Jefferson/Powell/The Embarcadero and Jefferson and Taylor Streets.

Under the Proposed Project all intersection operating conditions would be similar to those identified for Existing Plus Project conditions, and all intersections would operate at LOS B or better. The exception is the intersection of Jefferson/Powell/The Embarcadero which would change to LOS C under cumulative weekend midday conditions.

It should be noted that the removal of the westbound left turn into the Pier 39 garage and the northbound right from Powell Street to The Embarcadero southbound would result in minor improvement in operating conditions at the intersection of Jefferson/Powell/The Embarcadero during the weekday AM and PM peak hours.

Revised Roadway Configuration: Under this condition, the planned changes to the existing network were incorporated into the operational analysis, the same as above. In addition, segments of Taylor Street and The Embarcadero are proposed to operate as two-way streets. Figure 17 presents the proposed revised roadway configuration.

Taylor Street between The Embarcadero and Bay Street would be converted from a one-way southbound roadway to two-way, with one lane in each direction. Between Jefferson Street and The Embarcadero, the existing loading zone would remain. This revision would allow vehicles to access Pier 45 from Taylor Street.

The Embarcadero, between Powell Street and Taylor Street would be converted from one-way westbound operation to two-way operation, with one lane in each direction. This reconfiguration of The Embarcadero to two-way would provide for an additional lane of capacity for vehicular traffic. Tour bus parking would remain at the north curb of this section. As part of this proposed reconfiguration, the sidewalk on the north curb would be widened. Vehicles exiting Pier 45 would be able to continue on The Embarcadero to Powell Street.

Under the Revised Roadway Configuration, the weekday PM peak and weekday midday peak hour the delay at the intersection of Jefferson and Taylor would be slightly longer than under

conditions with the Existing Roadway Configuration; however, the LOS would remain at LOS B. Due to the addition of additional capacity at the intersection of Jefferson/Powell/The Embarcadero, this intersection would operate at LOS B, as opposed to LOS C under the Existing Roadway Configuration, during the weekend midday peak.

TRANSIT SERVICES

Transit demand generated by the proposed project is estimated to be minimal. Based on the project trip generation mode split information provided by the Department of City Planning, it is estimated the Proposed Project would generate approximately 75 new transit trips during the AM peak hour, 110 transit trips during the weekday PM peak hour, and 133 trips during the weekend midday peak hour. The direction of these trips is equally split between those entering and those leaving the project area. This estimated demand would be distributed between the four existing transit lines (26 AM and 25 PM weekday peak hour trips and 15 weekend peak hour trips) and the two cable car lines (12 AM and 20 PM weekday peak hour trips, and 20 weekend peak hour trips) that serve the project area. Most of the existing MUNI lines have additional capacities in the vicinity of the project, while the cable cars generally operate at capacity during the weekday PM peak hour and weekend midday peak hour. However, the F-Market line is anticipated to attract some cable car riders. This would relieve the over-capacity conditions at the cable cars. Therefore, it is not anticipated that this additional transit demand would result in impacts to transit.

PARKING AND LOADING REQUIREMENTS AND DEMAND

Parking

The Proposed Project improvements to Sheds A and C would consist of approximately 95,000 sq. ft. of visitor center, retail and conference center space. Based on this occupied space, the San Francisco Planning Code requires that the Proposed Project provide 193 parking spaces. The Proposed Project would supply a total of 200 parking spaces for the Proposed Project development and existing fish handling uses.

Parking demand for the project was estimated based on information provided in the *CTBS* and the *Guidelines for Environmental Review: Transportation Impacts*, July 1991, published by the City and County of San Francisco, Department of City Planning. The project would generate a peak parking demand for approximately 117 parking spaces. This parking demand represents the estimated number of vehicles that would park on the project site during the peak period.

Loading

Based on the 95,000 sq. ft. of office, retail, visitor center and conference uses, the San Francisco Planning Code requires that the project provide one loading space. The Proposed Project would provide a loading facility (one service space), thus meeting the Planning Code requirements.

Based on the *Guidelines for Environmental Review: Transportation Impacts*, Appendix 7, July 1991, it is estimated that the Proposed Project would generate approximately 14 delivery/service trips per day, which corresponds to a demand for one space in an average hour and in the peak hour. Delivery vehicles would consist of primarily of vans and trucks.

PEDESTRIAN CIRCULATION IMPACTS

A pedestrian crosswalk analysis was conducted for Existing Plus Project conditions at the intersection of Taylor and Jefferson Streets for the weekday and weekend midday peak hours. Under existing conditions during the weekday AM and PM and weekend midday peak hours, all four crosswalks at the study intersection experience LOS D or better. The exception is during the weekend midday peak, when the east crosswalk operates at LOS E.

The addition of project-generated pedestrian trips to existing pedestrian volumes would not result in a worsening in the LOS level from existing conditions. During the weekday midday peak hour, with the proposed project, the north and east crosswalks would continue to operate at LOS C, while the south and west crosswalks would operate at LOS B. During the weekend midday peak hour, the north and west crosswalks would continue to operate at LOS D, while the east crosswalk would remain at LOS E.

Under the Proposed Project, pedestrian traffic volumes would increase in the immediate vicinity of Pier 45, including on Taylor Street and on The Embarcadero between Taylor Street and Powell Street, and would add to the existing pedestrian congestion. Existing peak hour conditions at the north sidewalk on The Embarcadero are congested when tour buses unload and load passengers.

H. HAZARDS

This section discusses existing hazardous materials handling and public health impacts associated with the presence of and exposure to hazardous materials during construction of the proposed project. During reconstruction of the harbor facilities, potential hazardous materials may be encountered during dredging, replacement of existing timber pier structures, and relocation of rock fill. During construction of the Hyde Street Harbor Marina, hazardous wastes may also be encountered during excavation for the planned utility lines or any construction activities; during demolition of existing buildings; and during dredging operations necessary for construction of the berths.

HAZARDOUS MATERIALS HANDLING

A 20,000-gallon and a 210,000-gallon above ground fuel tanks were previously used to supply diesel to the fuel dock; the tanks were located at 440 Jefferson Street. Diesel was supplied to the fuel dock through approximately 400 feet of a 3-inch diameter delivery line. Approximately 100 feet of the existing pipe from the fuel tanks to the seawall was previously replaced with double walled steel pipe. The remaining 300 feet of pipe would be replaced and equipped with automatic shut off features, a leak detection system, a remote operated shut off switch, and pressure sensitive valves as part of the proposed project. The fuel dock would also be provided with spill containment equipment. Both above ground tanks have been removed and a soil and groundwater remediation is underway. Fuel is currently supplied to the fuel dock from a temporary truck with an approximately 8,000 gallon tank. The truck is located near the dock and is bermed; absorbent material is available to control potential spills.¹

The Port maintains a location on the southern edge of the outer lagoon (see Figure 16, page 103) for fishermen to recycle their used oil. The oil is poured into a 260-gallon above ground tank and the Port hires a contractor to recycle the oil as needed.² The tank is contained in a partially enclosed shed.

¹ Roberta Jones, Port of San Francisco, telephone conversation with Mary McDonald of Orion Environmental Associates, December 12, 1995

² Dan Hodapp, Port of San Francisco, telephone conversation with Mary McDonald of Orion Environmental Associates, April 24, 1995.

POTENTIAL HAZARDS IN BUILDINGS AND STRUCTURES

Building materials commonly used in older buildings that may pose public health hazards include asbestos, electrical equipment such as transformers and fluorescent light ballasts that contain polychlorinated biphenyls (PCBs), fluorescent lights containing mercury vapors and lead-based paints. If present in a building being demolished, there may be a potential risk of worker exposure, and possibly public exposure, if these hazardous materials should become airborne or released as a result of an accident. These materials would also require special disposal procedures. In addition, existing piers that are planned for removal are constructed of creosote treated timber and may require special disposal procedures.³

No building surveys have been performed to identify whether hazardous building materials are present in the Bell Smoked Fish building which would be demolished during construction of the Harbor Services Facilities. Due to the age of the building, however, these materials could potentially be present. A building survey to identify PCB-containing electrical equipment or fluorescent light ballasts, asbestos, lead-based paint, fluorescent lights potentially containing mercury vapors, and other potentially hazardous building materials has been described as part of the proposed project.

Any hazardous materials identified in the buildings or piers would be removed and disposed of prior to pier removal or building renovation or demolition. The removal and disposal would be performed in accordance with applicable federal, state, and local hazardous materials regulations described in Appendix D. This would minimize the potential risk of exposure of workers and the public to hazardous building materials. Abatement of hazardous building materials would be performed under the direction of the Port.

POTENTIAL SOIL CONTAMINATION

Installation of the proposed utilities would require excavation of soil along the alley leading to the fuel dock and pump out facility (see Figure 16, page 103); it is not expected that groundwater would be encountered in this excavation. Hazardous wastes may potentially be present in the

³ Currently, the Regional Water Quality Control Board does not approve the use of creosote treated timber for construction of piers because they are considered to pose a threat to fish and wildlife health.

soil due to previous land uses along the proposed utility alignment, because hazardous wastes were contained in the fill materials used at the site, or due to migration from nearby hazardous waste sites. No soil removal is planned as part of the renovation of Sheds A and C.

The potential presence of hazardous wastes within the proposed utility alignment was evaluated by completing a site history, reviewing existing hazardous waste sites within a one-half mile radius, and reviewing previous sampling conducted. As described below, sampling was previously conducted within the proposed utility alignment but the analytical program did not include all of the laboratory analyses necessary to identify all of the chemicals potentially present in the soil or those required by the "Maher" Ordinance. Sampling and analysis of the soil to identify whether hazardous wastes are present in the soil and to comply with the requirements of the "Maher" Ordinance will be conducted by the Port following preliminary engineering to identify the specific location of ground disturbing activities.

Potential Hazardous Wastes Based on Site History

Based on the site history prepared for the vicinity of the proposed utility alignment (see ENVIRONMENTAL SETTING, Section III.H, Hazards) there are numerous potential sources of hazardous wastes. Those land uses that potentially involved the use of hazardous materials are summarized in Table 13 with a listing of the hazardous wastes potentially used. Potential hazardous wastes related to each land use are as follows:

- Potential hazardous wastes present as a result of Selby Smelting and Iron Works (located at 680 Beach in the 1800's) include heavy metals such as lead and arsenic,⁴ solvents, acids, and cyanide. It is reported that the smelter dumped slag to the north of the plant, along Jefferson Street between Hyde and Leavenworth streets.

⁴ Heavy metals are those considered to by the regulatory agencies to be persistent and bioaccumulative toxic substances.

Table 13

Summary of Land Uses Potentially Involving Hazardous Wastes

Location	Land Use	Approximate Date	Potential Source of Hazardous Materials	Potential Hazardous Materials Present
600 to 680 Beach Street	Smelter	1864-1885	Smelting Operations Dumping	Heavy Metals, Cyanide, Acids, Solvents
	Manufactured Gas Plant	1898-1906	Coal Wharf Above Ground Tanks Pipe Shop	PNAs, Heavy Metals Crude Oil, Manufactured Gas Solvents, Petroleum Products, Heavy Metals Crude oil
			Explosion Plant Operations	PNAs, Benzene, Ammonia, Cyanide, Hydrogen, Oil and Grease
			Refuse Fill	Various
	Cannery/Warehouse/Arcades and Bazaars	1907-1994	Underground Tanks Box Printing	Crude Oil Inks, Solvents, Heavy Metals, Oil and Grease
Jefferson Street	Railroad	1914- ?	Track Maintenance	Oil and Grease, Petroleum Products, PNAs, Pesticides, PCBs, Lead, Cyanide
Hyde Street Pier	Gas Stations	1948 - 1995	Product and Oil Storage, Usage	Gasoline, Diesel, Oil, Heavy Metals, Solvents
	Fish Dealing and Handling	1954-1970	Refrigerant	Freon
	Refrigeration	1955-1957	Refrigerant	Freon
	Engine Filters	1955-1957	Oil Usage	Petroleum Products, Heavy Metals, PCBs
2936 Hyde Street	Diesel Engine Repair	1948-1971	Engine Repair	Solvents, Petroleum Products, Heavy Metals, PCBs
	Fish Handling	1980-1995	Refrigeration	Freon
2941 Hyde Street	Diesel Engine Repair	1974-1994	Engine Repair	Solvents, Petroleum Products, Heavy Metals, PCBs

Table 13 (cont')

Summary of Land Uses Potentially Involving Hazardous Wastes

Location	Land Use	Approximate Date	Potential Source of Hazardous Materials	Potential Hazardous Materials Present
440 Jefferson Street	Fish Handling	1957-1995	Refrigeration, Potential Underground Storage Tank	Freon, Petroleum Products
440 Jefferson Street	Gasoline and Diesel Storage	1935-1994	Above and Below Ground Tanks	Gasoline, Diesel
490 Jefferson Street	Fish Smoking/Handling	1948-1987	Refrigeration	Freon
494 Jefferson Street	Fish Handling	1985-1987	Refrigeration	Freon
500 Jefferson Street	Painters Storage	1948-1950	Material Storage	Paints, Heavy Metals, Solvents

Notes:

The alignment is underlain by fill materials, including 1906 earthquake and fire fill and potentially smelting slag; potential hazardous materials associated with the fill include PNAs, petroleum products, solvents, heavy metals, cyanide and acids.
 PNAs = Polynuclear Aromatic Hydrocarbons
 PCBs = Polychlorinated Biphenyls

Source: Orion Environmental Associates, 1995

- Potential hazardous wastes associated with the manufactured gas plant formerly at 600 to 650 Beach Street, include PNAs⁵, benzene, ammonia, cyanide, hydrogen, and oil and grease. Potential hazardous materials associated with the above ground tank and pipe shop located within this facility include crude oil, petroleum products, solvents, and heavy metals. A part of the plant was also underlain by refuse fill which may be associated with various types of contaminants.
- Potential contaminants associated with the underground storage tanks at the Cannery include crude oil. A box printing operation was located within the cannery which would also be associated with the use of inks (inks may contain metals), solvents, oil and grease, and heavy metals.
- Potential hazardous wastes associated with the California Belt Railroad on Jefferson Street include oil and grease, petroleum products, PNAs, pesticides, PCBs⁶, lead, and cyanide.
- Hazardous wastes potentially related to land uses on the Hyde Street Pier include gasoline and other petroleum products such as diesel, oil, solvents, heavy metals, and freon.
- Potential hazardous wastes related to the fill include PNAs, petroleum products, solvents, heavy metals, cyanide, and acids.
- Potential hazardous wastes related to land uses in the vicinity of the proposed alignment since the area was filled include petroleum products, heavy metals, solvents, inks, PCBs, and freon.

⁵ PNAs are polynuclear aromatic hydrocarbons, many of which are carcinogenic (cancer causing).

⁶ PCBs are polychlorinated biphenyls.

Potential Hazardous Waste Sites

Additional potential sources of hazardous wastes were identified by: (1) a computerized record search to identify potential hazardous waste sites within a one-mile radius of the project area;⁷ and (2) review of regulatory agency files to characterize the sites identified by the computerized records search that are within a 1/2-mile radius of the project area; and (3) a visual site reconnaissance by Orion Environmental Associates.⁸ Potential sites were identified within a one mile radius. Agency files for only those sites within a one-half mile radius were reviewed because these sites are considered to have the greatest potential to impact the proposed utility alignment if groundwater quality has been affected because groundwater plumes can travel over relatively long distances. The regulatory databases used to identify these sites are discussed in Appendix E.

The computerized record search was also used to identify whether there is a permitted underground storage tank at the proposed utility alignment, or whether sites along the alignment are permitted to generate hazardous wastes under the Resource Conservation and Recovery Act which is implemented by the U.S. Environmental Protection Agency (U.S. EPA). Underground storage tanks are common sources of soil and groundwater contamination, particularly in older tanks where leakage is common. Underground storage tanks have been used in a variety of industries for the storage of gasoline, diesel, chemicals, waste oil and other chemicals. Prior to regulation in the 1980s, underground storage tanks were not subject to monitoring or provided with secondary containment. If a tank leaked, the contents would migrate to the soil, and if undetected, could also contaminate the groundwater. Current requirements for underground storage tanks include tightness testing on a regular basis to monitor for leakage. The presence of a permitted underground storage tank at a site does not necessarily imply that soil or groundwater contamination is present, only that such a potential exists. Similarly, identification of a site that is permitted to generate hazardous wastes only indicates the potential for hazardous substances to be present; it does not necessarily indicate that an environmental problem exists.

⁷ NATEC Environmental Reporting Services, Ltd, Environmental Disclosure Report, January 16, 1995.

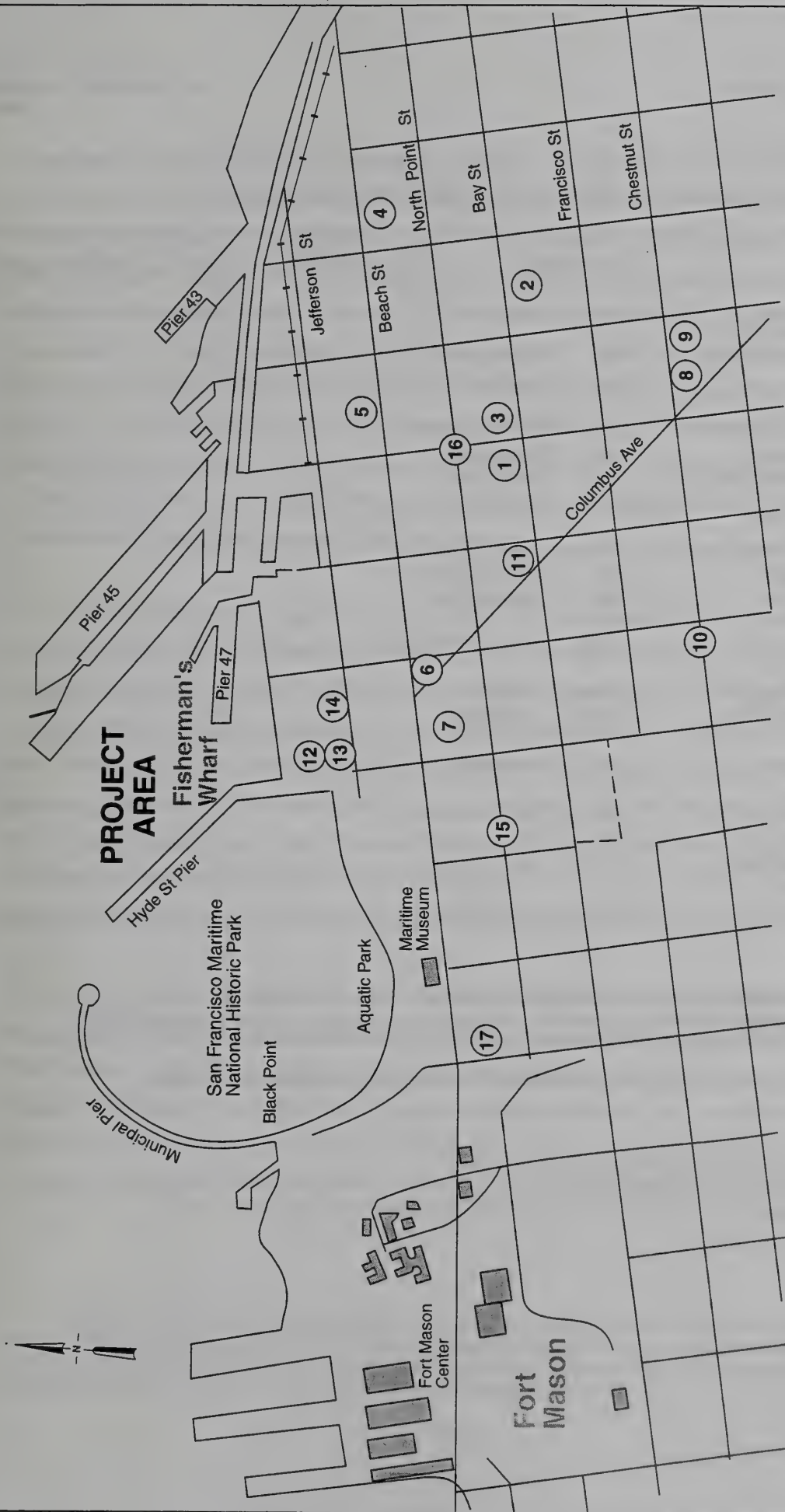
⁸ McDonald, Mary, Orion Environmental Associates, site visit, June 7, 1995.

The computerized records search identified a permitted underground storage tank located at San Francisco Marine, 442 Jefferson Street. The Mobil Oil Marine Station (foot of Hyde Street) was identified as a RCRA permitted hazardous waste generator. No other permitted underground storage tanks or hazardous waste generators were located near the planned utility alignment. The record search identified 17 sites within a one-mile radius of the proposed utility alignment where hazardous substances were known or suspected to have resulted in the presence of non-native compounds in the soil or groundwater. These sites are shown in Figure 18 and listed in Table 14 and discussed below.

Regulatory agency file reviews were conducted for those sites located within a 1/2-mile radius of the project site to characterize the type and extent of contamination identified. If contamination extends off-site at these locations, it could potentially affect soil and groundwater quality at the project site. Factors which influence the ability for one of these sites to affect the project site include groundwater flow direction, off-site extent of contamination, and distance from the project site. The general groundwater flow direction in the vicinity of the project site is towards the north. Based on this, sites located to the south of the project site with contamination extending off-site would have the greatest likelihood of affecting soil and groundwater quality at the project site, depending on the extent of contamination and their distance from the project site. Those sites located more than 1/2-mile from the project site are not expected to affect soil or groundwater quality at the project site because of their distance.

Two sites identified by the database search were identified on the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) list which includes sites designated for investigation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). One CERCLIS site is the former gas plant in the block bound by Beach, Jefferson, Hyde, and Leavenworth streets (identified as 680 Beach Street) as described above. The other CERCLIS site is a laundry service. Both sites were recommended for no further action following a preliminary assessment or site inspection.⁹ Five sites were identified on the Cal-Sites list which includes sites that have been identified by the Historical Abandoned Site Survey Program and researched by the California Department of Health Services (currently

⁹ A preliminary assessment and site inspection are the first two steps of investigation under CERCLA to identify whether a site is potentially contaminated. A preliminary assessment generally includes a review of site information and a site visit. If the potential for contamination is indicated, then a site inspection is generally conducted to review the site in more detail and samples are usually collected from areas that are suspected to be contaminated.



(Not to Scale)

LOCATION OF POTENTIAL HAZARDOUS WASTE SITES

(see also Table 14, page 154)

FIGURE NO. 18

SOURCE: ORION ENVIRONMENTAL ASSOCIATES/THE DUFFEY COMPANY

Table 14
Potential Hazardous Waste Sites within a One-mile Radius of the Project Site.

Map No.	Site Name	Site Address	CERCLIS	CAL-SITES	CORTESE	LUST
1	Beaverstone Bay Development/Shell	500 Bay Street			x	x
2	Waterfront Iron Works	335 Bay Street		x		
3	Unocal	490 Bay Street			x	x
4	SF Muni Kirkland Bus Yard	151 Beach Street			x	x
5	Fresco Properties	350 Beach Street			x	x
6	Vanerp, Dirk Metalsmiths	619 Beach Street		x		
7	PG&E Gas Plant /Selby Smelter Site	680 Beach Street	x			
8	Golden Gate Refuse Company	600-690 Chestnut Street		x		
9	Chestnut Property	650 Chestnut Street				x
10	Red Star Laundry	920 Chestnut Street	x			
11	Chevron	1196 Columbus Avenue			x	x
12	Port of San Francisco	Base Hyde Street				x
13	Oswald Machine Works	2936 Hyde Street		x		
14	Mobil Bulk Plant	440 Jefferson Street			x	x
15	Shell	899 North Point Street			x	x
16	Industrial Manufacturers	2594 Taylor Street		x		
17	Kodak	3250 Van Ness Avenue			x	

Abbreviations:

CERCLIS = Comprehensive Environmental Response, Compensation, and Liability Information System

CAL-SITES = Listing of potential hazardous waste sites maintained by the Department of Toxic Substances Control

CORTESE = Listing of potential and confirmed hazardous waste sites, previously maintained by the Office of Planning and Research

LUST = Leaking Underground Storage Tank List maintained by the Regional Water Quality Control Board

Notes:

See text of Appendix E for explanation of each database identified

Map number refers to the site number shown on Figure 18.

Source: Orion Environmental Associates; NATEC Environmental Reporting Service, January 16, 1995

known as the Department of Toxic Substances Control). These sites were identified by the agency as potential hazardous waste sites but sampling has not necessarily been conducted to evaluate the potential for contamination. Based on the database review, the Department of Toxic Substances Control has recommended no further action for three of the sites (including Oswald Machine Works which was located adjacent to the proposed utility alignment) but recommended a Preliminary Endangerment Assessment for the Golden Gate Refuse Company located at 600 to 690 Chestnut Street and Industrial Manufacturers located at 2594 Taylor Street.¹⁰ A Preliminary Endangerment Assessment would identify the potential risks at these sites. However, both of these sites are more than one-half mile from the proposed utility alignment and were not reviewed further because they are not expected to affect soil or groundwater quality at the proposed utility alignment.

Nine sites were identified on the Cortese list which includes both potential and confirmed hazardous waste sites as of November 1990. Eight of these sites were also identified on the Leaking Underground Storage Tank (LUST) list which includes sites with confirmed leaking underground storage tanks indicating that they were on the Cortese list because of a confirmed leak. Of these sites, six are located within one-half mile of the proposed utility alignment; the location of each site is shown on Figure 18. Files available at the San Francisco Bay Regional Water Quality Control Board, San Francisco Department of Public Health, and the Port were reviewed for those six sites located within one-half mile of the proposed utility alignment to assess possible effects on the subsurface conditions at the proposed utility alignment.

Based on the information obtained from the file reviews, each of the sites identified is evaluated for its potential to affect soil and groundwater quality at the proposed project site in Table 15. The location of each site is shown on Figure 18. An underground storage tank previously located at the base of the Hyde Street Pier is identified as having a high potential to impact the proposed utility alignment. Information regarding the underground storage tank removal by the Port was not available in the files maintained by the San Francisco Bay Regional Water Quality

¹⁰ A preliminary Endangerment Assessment is an investigation conducted to determine whether current or past waste handling practices have resulted in the release or threatened release of hazardous substances which pose a threat to public health or the environment. If the investigation indicates a potential threat, a site investigation and subsequent clean up of the site would be required to mitigate any potential threats.

Table 15 Summary of Site Conditions for Potential Hazardous Waste Sites Within 1/2 Mile of Planned Utility Alignment

Map No.	Site Name/ Address	Incident	Soil Contamination	Groundwater	Contamination	Potential to Impact Planned Utility Alignment	Comments
1	Beaverstone Bay Development /Shell 500 Bay Street	UST	Copper: 330 mg/kg Lead: 4,176 mg/kg TPHg: 990 mg/kg Benzene: 7.9 mg/kg	TPHg: 5.3 mg/l Benzene: 1.4 mg/l		Low	Oil was identified in 10 of 22 groundwater monitoring wells located on and off site. A waste oil sample contained a total of 474 mg/kg of SOCs. The site has been redeveloped as a Hyatt Hotel, however no documentation of remediation is available in files. Planned site mitigation included excavation with treatment and off-site disposal of soil. The SFDPH required Shell to submit further information in a letter dated May 3, 1994.
3	Unocal 490 Bay Street	UST removal	NA	TPHg: 3.4 mg/l Benzene: 4.3 mg/l		Low	Free product identified on groundwater. 2,045 gallons were recovered but thick oily product remains on groundwater surface. Down gradient extent of dissolved constituents has not been characterized. 380 cubic yards of soil were removed during a soil remediation. Analytical data for soil are not available in RWQCB files. Investigation did not include analysis for nonpetroleum constituents. Case closure was requested by the site owner but denied by the SFDPH.
5	Fresco Properties 350 Beach Street	USTs, former coal gasification plant	PNA: 180 mg/kg	TPHd: 6,600 mg/l		Low	Oil was identified on the groundwater in seven of eight borings. Off-site source of diesel suspected.

See last page of table for explanation of abbreviations.

Table 15 Summary of Site Conditions for Potential Hazardous Waste Sites Within 1/2 Mile of Planned Utility Alignment

Map No.	Site Name/ Address	Incident	Soil Contamination	Groundwater Contamination	Potential to Impact Planned Utility Alignment	Comments
11	Chevron 1196 Columbus Avenue	UST removal	TPHg: 2,400 mg/kg TPHd: 1,100 mg/kg Benzene: 7.0 mg/kg Oil and Grease: 0.070 mg/kg	TPHg: 0.110 mg/l TPHd: ND Benzene: ND	Low	Oil and grease was also identified in soil samples from the UST excavation at higher concentrations than in subsequent soil samples from borings. Site closure was requested but denied by the SFDPH because TPHg was identified in two downgradient wells during the first quarter of 1994. Only limited information was available in files, no documentation of any remediation activities was available.
12	Port of San Francisco Base of Hyde Street	Previous UST removal	TPH: 450 mg/kg	Unknown	High	Soil contamination identified during nearby investigation. Assumed by the Port to be a result of a UST removed a long time ago.
6	Mobil Bulk Plant 440 Jefferson Street	Above ground storage tanks, UST	TPHg: 4,200 mg/kg TPHd: 21,000 mg/kg Benzene: 19 mg/kg	TPHg: 2.7 mg/l TPHd: 16.0 mg/l Benzene: 0.053 mg/l	Moderate	Free product was identified in six of 13 on and off site wells. Soil remediation to include removal of soil within bermed area. Groundwater remediation to include installation of recovery trench and wells. There was a previous spill of product in 1990.

Abbreviations:

Map number refers to the site number provided in Figure 18. See page 153 for explanation of criteria used to evaluate the potential impact to planned utility alignment.

mg/kg = milligrams per kilogram, equivalent to parts per million
 NA = Data were not available at time of file review
 PNAs = Polynuclear aromatic hydrocarbons
 TPH = Total petroleum hydrocarbons of unspecified type
 TPHg = Total petroleum hydrocarbons identified as gasoline
 UST = Underground storage tank
 RWQCB = SF Bay Regional Water Quality Control Board

mg/l = milligrams per liter, approximately equivalent to parts per million
 ND = Constituent was not detected in sample
 SOCs = Semivolatile organic compounds
 TPHd = Total petroleum hydrocarbons identified as diesel
 TPHoil = Total petroleum hydrocarbons identified as oil
 SFDPH = San Francisco Department of Public Health

Source: Orion Environmental Associates, 1995. Based on file review information obtained from the San Francisco Regional Water Quality Control Board, Port of San Francisco, and San Francisco Department of Public Works Bureau of Construction Management

Control Board. However, a letter from the Port indicates that petroleum hydrocarbons were identified in a soil sample from a boring drilled in the proposed utility alignment.¹¹

The former Mobil Oil Bulk Plant is located within the proposed project area and is considered to have a moderate potential for impacting the proposed utility alignment because it is located approximately 150 feet to the east. Petroleum related compounds have been identified in both the soil and groundwater at this site and up to two inches of free product¹² have been identified on the groundwater. This site is currently undergoing remediation.

The remaining four sites are located to the southwest of the proposed project. Free product has been identified on the groundwater at three of these sites. However, each of these sites is considered to have a low potential for affecting the proposed utility alignment because of their distance from the proposed project and because they are not located directly upgradient of the proposed project (the general direction of groundwater flow in the vicinity of the proposed project is northward).

Previous Site Investigations

A site investigation was conducted in June 1989 as part of the planning for the proposed Fisherman's Wharf Seafood Center.¹³ As part of this investigation, three soil borings were drilled to a depth of five feet within the proposed utility alignment (see Figure 16, page 103 for location of borings). A soil sample from the bottom of each boring was analyzed for Title 22 metals (including lead)¹⁴ and total petroleum hydrocarbons as gasoline, diesel, and motor oil.¹⁵

¹¹ Port of San Francisco, 1989. Letter from Jim Read to Department of Public Health. October 3.

¹² Petroleum products such as gasoline and diesel are immiscible with water when in their pure form. Because they are generally lighter than water, they will float on top of the groundwater surface when present and are called "free product".

¹³ AGS, Inc., 1989. Field Sampling and Chemical Laboratory Testing, Fisherman's Wharf Seafood Center. August 22.

¹⁴ Title 22 metals include a list of 17 metals contained in Title 22 of the California Code of Regulations that are considered persistent and bioaccumulative toxic substances. The metals include antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.

¹⁵ Analysis for total petroleum hydrocarbons identifies petroleum hydrocarbons present in a sample. The hydrocarbons can be distinguished as gasoline, diesel, oil, or other petroleum hydrocarbons based on the range of hydrocarbons identified in the chromatogram for the sample.

Metals are naturally occurring in soil and there are no regulatory criteria to identify what levels of metals may be potentially hazardous to public health and/or the environment. For screening purposes, the total metals concentrations are compared to the total threshold limit concentration and ten times the soluble threshold limit concentration which are used by the State of California to classify a waste.¹⁶ Only those metals concentrations that exceed these criteria are discussed in this section.

Mercury was identified at a total concentration of 2.7 milligrams per kilogram in the soil sample from Boring B1 and at 2.1 milligrams per kilogram in the soil sample from Boring B2. These concentrations are greater than ten times the soluble threshold limit concentration of 0.2 milligrams per liter for mercury. Thallium was identified at 70.1 milligrams per kilogram in the soil sample from Boring B2; this concentration is greater than ten times the soluble threshold limit concentration of 7.0 milligrams per liter for thallium. These are the only metals identified in the soil samples that exceeded the total threshold limit concentration or ten times the soluble threshold limit concentration. The total concentrations do not exceed ten times the soluble threshold limit by much. However, a waste extraction test would be required to determine whether the soluble concentrations exceed the soluble threshold limit concentrations.

Total petroleum hydrocarbons as gasoline was identified at 78 milligrams per kilogram and total petroleum hydrocarbons as motor oil was identified at 412 milligrams per kilogram in the soil sample from Boring B3. Total petroleum hydrocarbons were not identified in the soil samples from Borings B1 and B2. The Port of San Francisco has stated that Boring B3 was installed in the vicinity of a "long since removed" underground storage tank.¹⁷ The location of this boring is described as Site 12 in Table 14. Based on current Regional Water Quality Control Board policy, the soil removed for installation of the utilities may be placed back in the utility

¹⁶ Based on regulations contained in Title 22 of the California Code of Regulations, a waste would be considered hazardous for disposal purposes if the total concentration of a metal exceeded the total threshold limit concentration (TTLC) or if the soluble concentration exceeded the soluble threshold limit concentration (STLC). A waste extraction test is required to identify the soluble concentration of a metal. Because this test involves a ten to one dilution of the sample, the soluble concentration could not exceed the STLC unless the total concentration is at least equal to ten times the STLC. If the total concentration is less than ten times the STLC, a waste extraction test would not be required and the waste would not be considered hazardous.

¹⁷ Port of San Francisco, 1989. Letter from Jim Read, Port of San Francisco, to Les Lum, San Francisco Department of Public Health, October 3.

excavation.¹⁸ However, excess soil would not be suitable for unrestricted disposal, as discussed on page 161, because of the levels of petroleum hydrocarbons identified. Treatment or off-site disposal of this soil would be required.

Analysis of soil samples during the 1989 investigation included analysis of only Title 22 metals and petroleum hydrocarbons. Based on historical land uses in the vicinity of the proposed utility alignment there are additional hazardous materials that have been used and may potentially be present in the soil. The types of hazardous materials that may be present in the soil due to historic land uses are summarized in Table 13, page 148 (see Figure 16, ENVIRONMENTAL SETTING, page 103 for the locations of the addresses referenced). In addition, the "Maher" Ordinance requires analysis for additional chemicals that may be present in the soil; the analyses required by the "Maher" Ordinance include inorganic and bioaccumulative substances,¹⁹ volatile organic compounds,²⁰ PCBs, pH, flammability, cyanides, sulfides, and methane and other flammable gasses as well as other chemicals that may be required by the Department of Public Works.

Sampling of the soil for analysis of additional chemicals would be required by the "Maher" Ordinance prior to construction once the specific location of ground disturbing activities is identified. If the sampling identifies chemicals present at concentrations that could potentially threaten public health and/or the environment, the "Maher" Ordinance would require submittal of a site mitigation plan and remediation of the site to acceptable clean up levels as described in MITIGATION MEASURES, page 169.

Disposal of Soil

The Port of San Francisco estimates that more than 50 cubic yards of soil would be excavated for the installation of the proposed utilities. Sampling of any excess soil that could not be

¹⁸ Regional Water Quality Control Board, San Francisco Bay Region, 1995. Memorandum from Stephen I. Morse, Acting Executive Director, to All Utilities, Public and Private. August 18.

¹⁹ The required inorganic persistent and bioaccumulative substances are listed in Section 66699(b) of Title 22 of the California Code of Regulations.

²⁰ The required volatile organic compounds are listed in Title 40 of the Code of Federal Regulations, Part 122, Appendix D, Table II.

placed back in the excavation would be required to classify the soil for disposal purposes. If the soil is classified as nonhazardous but contains petroleum hydrocarbons, it may be treated at a nearby City owned bioremediation facility located at Pier 96 and disposed of as a nonhazardous waste. If the soil is classified as a hazardous or restricted waste, it may be disposed of at an appropriately permitted off-site disposal facility. Depending on the chemical quality it may be disposed of at a Class I, Class II, or Class III disposal facility within California. Soil with petroleum hydrocarbon levels greater than 100 milligrams per kilogram must be treated or disposed of at a Class I or II landfill. Soil with detectable levels of petroleum hydrocarbons below 100 milligrams per kilogram can be disposed of at a Class III landfill.²¹ Alternatively, the soil may be disposed of at an out-of-state disposal facility that would be subject to federal, state, and local regulations. Additional sampling and analysis is identified as a mitigation measure to determine the appropriate disposal method for the soil (see MITIGATION MEASURES, Section V.H, Hazards). If the soil is classified as a hazardous waste, hauling and disposal of the soil would require a hazardous waste manifest and must be done by a state certified hazardous waste hauler.²²

EXPOSURE TO SUBSURFACE HAZARDOUS WASTES DURING CONSTRUCTION

During soil excavation, humans could be exposed to dust emissions, chemical vapors, or other airborne contaminants. Exposure could occur through inhalation of vapors, fumes, or contaminated dust; through direct contact with contaminated materials; or through direct or indirect ingestion. The excavation contractor would be required to comply with federal and state regulations designed to protect worker and public health from exposure to hazardous materials. A Site Health and Safety Plan would be prepared which would address measures necessary to protect worker and public health during excavation and disposal of the soil (see MITIGATION MEASURES, Section V.H, Hazards). The plan would establish policies and procedures to protect workers and the public from potential hazards posed by hazardous materials present in

²¹ All California landfills have been divided by regulatory authority into the categories of Class I, Class II, or Class III facilities. Only Class I facilities can accept hazardous wastes, although the chemical concentrations must be less than the federal land disposal restriction treatment standards (land ban). Class II and III facilities can accept nonhazardous wastes that meet acceptance criteria determined by the state within broad guidelines for each class of landfill. Each landfill also has individual acceptance criteria. Most ordinary household solid wastes are disposed of at Class III landfills.

²² Waste haulers are certified in accordance with Title 22 of the California Code of Regulations, Chapter 13, Section 66263.17.

the soil, and it would be prepared in accordance with federal and California OSHA regulations for health and safety plans. During construction, a dust control program would also be implemented, if necessary, to minimize public health and air quality impacts associated with chemical laden dust (see MITIGATION MEASURES, Section V.H, Hazards).

The California OSHA regulates worker exposure to hazardous materials. To reduce the potential for public health risks due to dust emissions during construction activities, dust control measures would be taken to reduce visible dust emissions and air quality pollutants. This would include regular watering of any exposed soil (using non-potable water as required by Ordinance 175-91) and covering the stockpiles and trucks carrying spoil materials.

To reduce the potential for risks to public safety, a fence would be erected around any area where chemicals have been identified in the soil from the time that ground surfaces are exposed until the time that all remedial activities have been completed. Site access would also be restricted to necessary personnel. Warning signs prohibiting access by the general public onto the excavation site would also be posted at all construction access points.

DISPOSAL OF DREDGED SEDIMENTS

It is estimated that approximately 20,000 cubic yards of sediment would be dredged to create the planned berths. This would require permission from the U.S. Army Corps of Engineers and the Regional Water Quality Control Board. Sediment sampling in 1994 indicated that the sediments near Pier 45 contain detectable levels of antimony, cadmium, chromium, copper, lead, mercury, nickel, silver, zinc, sulfides, tributyltin, PNAs, phthalates, and oil and grease.²³

Bioassay results indicate that the sediments have less toxic effects than those from Alcatraz Island; based on this it is expected that the sediments would be suitable for disposal at the Alcatraz disposal site. Minimal worker or public exposure to sediments would be expected during sediment dredging and disposal.

²³ Advanced Biological Testing, 1995. Results of Chemical, Physical, and Bioassay Testing of Sediments Proposed for Maintenance Dredging at Fisherman's Wharf, Port of San Francisco. January 12.

HAZARDOUS MATERIALS HANDLING DURING HARBOR AND PIER OPERATION

Hazardous materials handling within the project area would be improved with the proposed project. As part of the improved facilities, a new/replacement fuel delivery pipeline from the seawall to the fuel dock and new spill containment equipment would be installed. The new pipeline would include automatic shut off features, a leak detection system, a remote operated shut off switch, and pressure sensitive valves which would reduce the potential for accidental spillage or leakage from the fuel delivery system. Addition of spill containment equipment would allow prompt containment of any material that may be accidentally released. These measures would reduce the potential for worker and public exposure to hazardous materials used at the fueling facility. Lighting would also be installed at the fuel dock.

The Port will continue to provide the above ground tank to collect waste oil from fisherman who use the harbor; this waste oil is recycled by an outside contractor to the Port of San Francisco. The potential for illegal dumping of waste oil into the Bay by fisherman is and will continue to be reduced with or without the project because this facility is provided by the Port.

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V. MITIGATION MEASURES

In the course of project planning and design, measures have been identified that would reduce or eliminate potential environmental impacts of the proposed project. Some of these measures have been, or would be, voluntarily adopted by the Port and thus are proposed; some are under consideration by the project sponsor. Implementation of some measures may be the responsibility of other agencies. Measures under consideration may be required by the Port Commission, or the Planning Commission as conditions of project approval, if the project were to be approved. Each measure and its status is discussed below.

There are measures that are now required by law that were enacted for the purpose of and serve to prevent potential impacts from a proposed project. They are summarized here for informational purposes. These measures include: observance of state and federal OSHA safety requirements related to handling and disposal of hazardous materials; dredging; police and fire protection; utilities services; and cultural resources.

No impacts are identified for Water Quality, Land Use and Zoning, Marine Biology, Air Quality, Public Utilities, Hazards or Transportation. These areas do not require mitigation; however, several improvement measures have been suggested to the Port during preparation of this EIR and many of these measures are included as part of the proposed project. All of these measures are described in the following section.

A. WATER QUALITY (Best Management Practices)

Because of the proximity of the project site to Aquatic Park and the concern about water quality issues, the Port has agreed to expand their existing "Best Management Practices Plan" to include specific measures described in Section IV, ENVIRONMENTAL IMPACTS for protecting and enhancing water quality in the harbor.

The Port has in place a "Best Management Plan" for maintenance dredging, oil spills, and cleanup of floatables in the Harbor. A brief summary of measures required by law and those described as part of the project follows:

MEASURES REQUIRED BY LAW

1. Oil spill response in the Harbor is regulated by the federal Clean Water Act and the California Oil Spill Response Act, with enforcement by the U.S. Coast Guard and the California Department of Fish and Game, respectively. These regulations require clean-up of fuel spills and authorize assessment of penalties for violation of water quality regulations.
2. Dredging in the Harbor and disposal of dredge spoils is regulated by the U.S. Army Corps of Engineers (under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act) and the Bay Conservation and Development Commission. The Regional Water Quality Control Board certifies that water quality objectives are met as part of the permit approval process for dredging.
3. Other wastes from boats (floatables) are regulated by the Port as part of the Rules and Regulations for Commercial Fishing Vessels. Item No. 847 under these regulations states that 'no person shall throw, discharge or deposit from any vessel or from the shore or float or otherwise any kind or refuse or sewage whatsoever into or upon the waters of the harbor, or in, on or upon the banks, walls, sidewalks, or beaches or any waters within the jurisdiction of the San Francisco Port Commission. All garbage must be removed from the area.' Item No. 34, Section 8C, Item 847 under the Port Rules and Regulations states that 'No person shall dump or discharge oil, spirits, flammable liquids or contaminated bilge water into any area under the jurisdiction of the San Francisco Port Commission.' The Port Wharfinger is responsible for enforcing these rules.

MEASURES INCLUDED AS PART OF THE PROPOSED PROJECT

1. The Port currently maintains and would continue to maintain a spill prevention and response plan that specifies procedures to follow in the event of a fuel spill. The plan delineates source identification, clean-up, and notification (including coordination with the U.S. Coast Guard) procedures to contain and minimize any effect of a fuel spill in the Bay. The Wharfinger is designated as the Local Response Coordinator for the Harbor and maintains a current Oil Spill Notification List of federal and state agencies to be contacted in the event of a spill, to provide information on the nature and location of the spill. Emergency fuel clean-up equipment is maintained at the existing fuel dock and at the Wharfinger's office and includes absorbant booms and absorbant pads. The Port would continue to train personnel in the use of this equipment and would continue to educate boat owners/operators about illegal discharges and spills in the Bay and in harbor waters.
2. The Port is proposing installation of new facilities to minimize the potential for fuel leaks from the storage tanks to the fuel dock. These would replacement of the fuel delivery pipeline from the seawall to the fuel dock that would include automatic shut off features; a leak detection system; remote operated shutoff switch secondary containment piping over the pipeline and pressure sensitive features.
3. The Port is proposing an oil-water separator for the fuel dock area. Impermeable surfaces (docks and parking areas) would be designed to collect runoff in a depressed area directing stormwater to the oil-water separator prior to disposal to the Bay. After oil and water has been separated, all disposal shall either be to City sewer (noncontaminated water) or to the appropriate facility (oil, contaminated water), with no discharge to the Bay.
4. The Port is proposing a pump-out station at the fuel dock for disposal of chemical toilet waste on board boats in the harbor. The pump-out would have a capacity of 20 gallons per minute and would be connected to the City's sanitary sewer system. The proposed pump-out would reduce the likelihood of illegal discharges to the Bay. The wharfinger would be responsible for enforcing the use of the pump-out by boats in the harbor. Pump-out lines shall be capped during all movement to and from boats.

V. MITIGATION MEASURES

5. The Port, in coordination with the San Francisco Fire Department, will continue to use a fireboat to periodically hose off the breakwater during outgoing tides so that debris and animal wastes are dispersed into the Bay and not into the Harbor.
6. The Port will continue to use a work skiff one or two hours each day to clean up floating debris in the harbor. The Port will increase the frequency of the skiff operation, on an as needed basis. It shall be the responsibility of the Port Wharfinger to verify that the skiff operation takes place daily.
7. The Port proposes a dock design that includes boat berths enclosed on three sides by floats encased with foam pontoons that would ride slightly below the surface of the water. No berthing would be provided on the west side of the dock, nearest Aquatic Park. The westernmost float would be fitted with a flexible 'skirt' which would eliminate gaps between floats.
8. The Port would coordinate with the San Francisco Recreation and Park Department, and National Park Service and BCDP and swimmers at Aquatic Park regarding scheduling of dredging activities to avoid conflict with scheduled on weekends.
9. Port construction specifications would include use of temporary wraps for piles removed in the harbor. This will reduce the release of particles to the Bay.
10. The Port will continue not to conduct dredging activities during herring season.
11. The Port will continue to coordinate with restaurant owners and nearby commercial operators to improve housekeeping practices (such as improved grease disposal bins, dumpsters with side covers, increased cover garbage receptacles, sidewalk sweeping, etc.) to reduce litter and trash entering harbor wastes. All garbage areas could be confined with catchment basins to prevent flow of stormwater into the Bay.
12. The Port will continue the weekday supervision of the harbor and will add weekend supervision of boat activities. The Port will also routinely inspect fish processing facilities on Pier 45.

B. PUBLIC SERVICES

REQUIRED BY LAW OR CODE

1. The San Francisco Fire Department, Bureau of Fire Prevention, checks plans for alterations and new construction of buildings for compliance with laws and ordinances related to egress, fire protection, and fire spread control.¹ Implementation of the proposed project would require compliance with local regulations, which might include installation of: a minimum of two suction hydrants on Pier 45; dry and wet standpipe outlets; additional fire alarm call boxes; sprinkler system in Sheds A and C; floating marine diesel fuel depot - automatic fire suppressant equipment; signage for egress; and provisions for fire lanes and curb marking and installation of low and high pressure hydrants, to meet fire department regulations.

C. HAZARDS

There were no significant impacts identified in relation to hazardous wastes. The measures identified below are those that will be required by law to address the potential presence of hazardous wastes within the project area.

MEASURES REQUIRED BY LAW

1. Prior to demolition of the Bell Smoked Fish Building, the Port will ensure that a building survey be conducted to identify polychlorinated biphenyl- (PCB) containing electrical or hydraulic equipment, lead-based paint, fluorescent lights potentially containing mercury vapors, and other potential hazardous building materials. If necessary to protect the public health, construction workers, or the environment, removal and abatement of identified hazardous building materials or other hazardous substances will be conducted prior to demolition or renovation of existing structures. The abatement will be conducted in accordance with the requirements of the Bay Area Air Quality Management

¹ San Francisco Fire Department Annual Report, 1992 - 1993, June 1, 1994.

District, the California Occupational Safety and Health Administration, and federal, state and local laws including Titles 22 and 23 of the *California Code of Regulations* (hazardous materials and water quality) and the City's Hazardous Materials Ordinance. The Port will ensure that demolished piles are appropriately disposed of. Approximately 120 piles would be demolished and disposed of.

2. The Port will ensure that the "Maher" Ordinance be followed for excavation of more than 50 cubic yards of soil. First, a site investigation must be conducted, including a minimum of three soil borings and analysis of a minimum of three soil samples for inorganic persistent and bioaccumulative substances as listed in Section 66699 (b) of Title 22 of the *California Code of Regulations*; volatile organic compounds; polynuclear aromatic hydrocarbons; total petroleum hydrocarbons as gasoline, diesel, and oil; oil and grease; polychlorinated biphenyls; pesticides; pH; flammability; cyanides; sulfides; methane and other flammable gasses; and ammonia. The results of the analyses will also be used to identify appropriate disposal or treatment options for any soil produced during excavation.

Upon completion of the investigation, the Port will ensure that a soil sampling and analysis report be prepared to describe the methods and results of the investigation. In accordance with the "Maher" Ordinance, the report will be submitted to the San Francisco Department of Public Works, and the San Francisco Department of Public Health.

If the soil sampling and analysis report indicates the presence of hazardous wastes in the soil, then the Port will ensure that a site mitigation plan is submitted to the San Francisco Department of Public Works and the San Francisco Department of Public Health. The site mitigation plan will be prepared by a qualified professional and include a determination as to whether the hazardous materials in the soil are causing or likely to cause substantial environmental or health and safety risk as well as measures identified to mitigate the risks. Any recommended soil sampling and analysis to demonstrate appropriate mitigation will be described in the plan.

In accordance with the "Maher" Ordinance, the Port will ensure that any mitigation measures identified be carried out. Upon completion, a qualified professional will certify that all of the mitigation measures described in the mitigation report were performed and verified by conducting follow-up soil sampling and analysis.

3. The Port will ensure that the construction contractor provides and implements a Health and Safety Plan prepared by a certified industrial hygienist to meet all applicable federal, state, and local environmental and worker safety laws. The plan will establish policies and procedures to protect worker and the public from potential hazards posed by hazardous materials at the project site, and it will be prepared according to federal and California OSHA regulations for hazardous waste health and safety plans. Title 29 of the Federal Code of Regulations, Section 1910.124, and Title 8 of the California Code of Regulations Section 3203, include requirements for the preparation of health and safety plans. The Site Health and Safety Plan will include items such as the following, as applicable to site conditions: identification of contaminants, potential hazards, material handling procedures, dust suppression measures, personal protection clothing and devices, controlled access to the site, health and safety training requirements, monitoring equipment to be used during construction to verify health and safety of the workers and the public, measures to protect worker and public health and safety, and emergency response procedures.

D. CULTURAL RESOURCES

The Initial Study (see Appendix A.1, Page A1) summarized information from "A Cultural Resources Overview of the Fisherman's Wharf Seafood Center Project Area and Environs" (March 1989) and determined that no further analysis of this topic was needed in this EIR. The Initial Study provided that the program of archaeological monitoring described in the 1989 report would mitigate the potentially significant impacts of the project and is therefore included in the EIR.

MEASURE INCLUDED IN PROJECT

1. Given the strong possibility of encountering the remains of cultural or historic artifacts or features within the project site, the Port would retain the services of an archaeologist(s) with expertise in both prehistoric and ethnographic materials and maritime history. The archaeologist would supervise a program of on-site monitoring during site excavation and would record observations in a permanent log. Should cultural or historic artifacts be found following commencement of excavation activities, the archaeologist would assess the significance of the find, and immediately report to the Environmental Review Officer (ERO) and the President of the Landmark Preservation Advisory Board (LPAB). Upon receiving the advice of the consultants and the LPAB, the ERO would recommend specific mitigation measures, if necessary. The monitoring program, whether or not there are finds of significance, would result in a written report to be submitted first and directly to the ERO, with a copy to the Port.

Excavation or construction activities which might damage discovered cultural resources would be suspended for a total maximum of four weeks over the course of construction to permit inspection, recommendation and retrieval, if appropriate.

2. If cultural resources of potential significance are discovered, an appropriate security program would be implemented to prevent looting or destruction. Any discovered cultural artifact assessed as significant by the archaeologist upon concurrence by the ERO and the President of the LPAB, would be placed in a repository designated for such materials or displayed in a public place to be determined in conjunction with the ERO and the President of the LPAB.

VI. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

In accordance with Section 21067 of the California Environmental Quality Act (CEQA), and with Sections 15040, 15081 and 15082 of the State CEQA Guidelines, the purpose of this Section is to identify impacts that could not be eliminated or reduced to an insignificant level by mitigation measures included as part of the proposed project, or by other mitigation measures that could be implemented.

No significant environmental effects that cannot be avoided if the proposed project is implemented have been identified.

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VII. ALTERNATIVES TO THE PROPOSED PROJECT

This Section identifies alternatives to the proposed project and discusses environmental impacts associated with each alternative. The Port of San Francisco could approve an alternative instead of the project if the decision makers believed the alternative would be more appropriate for the site(s).

The range of reasonable alternatives must focus on those alternatives that can feasibly accomplish most basic project purposes and avoid or reduce one or more of the project's significant impacts. The EIR is required to "identify and explain the rationale for rejecting those alternatives considered but removed from detailed study. The factors taken into account when selecting an alternative may include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent can reasonably acquire, control or otherwise have access to the alternative." (CEQA Amended Section 15088.5, September 19, 1994)

Sufficient information on alternatives is required to allow meaningful evaluation and comparison with the proposed project. As part of the environmental review process for the Hyde Street Harbor/ Pier 45 project, the City has analyzed three alternatives that would feasibly accomplish most basic project purposes. The Port, the project sponsor, has not rejected any of the three alternatives, however, the Hyde Street Harbor, maximum expansion alternative proposed by the Port in 1988 is not appropriate at this time, given the decreasing volume of fish being landed by commercial fishing boats in the Bay Area. This alternative is retained for informational purposes and for future possible consideration by the Port. Based on environmental and public review, the Port will select an apparent best alternative for detailed design and implementation.

One alternative design for the Harbor and Harbor Services Area is considered, and two alternative uses of Sheds A and C on Pier 45 are considered. Because most physical changes for each of the alternatives are the same as for the proposed project, the analysis focuses on features or uses that would have differences. For Alternative A, the additional Harbor berths and Harbor Services Area alternative, the analysis focuses on potential effects to water quality and

marine biology from an expanded dock area (86 floating berths compared with 40 floating berths for the proposed project). For the Pier 45, Sheds A and C alternative uses (alternatives B & C), the analysis focuses on identifying differences in traffic and parking impacts. None of the alternatives, including the proposed project would generate more than 2,000 vehicles per day, which is the threshold used by Bay Area Air Quality Management District considered capable of producing air quality problems, therefore mobile emissions are not addressed in this DEIR.

In addition to reasonable alternatives to the project, CEQA requires that the EIR evaluate the "No Project" Alternative. The No Project Alternative analysis must discuss existing conditions as well as reasonably foreseeable future conditions without the project based on current plans and available infrastructure.

NO PROJECT ALTERNATIVE

The No Project Alternative would consist of leaving the Hyde Street Harbor and Pier 45 Sheds A and C as they exist in their present condition. Information describing the existing conditions of the project area is in Section III. SETTING. The key features of the No Project Alternative are summarized below.

HYDE STREET HARBOR

- No change; retain 116 assigned boat slips + 14 rafted boats in Fisherman's Inner and Outer Lagoons, and unauthorized or controlled anchoring of boats in the outer harbor would continue.

PIER 45

- Sheds A and C - retain existing storage of fishing gear, parking (50 vehicles in sheds, 120 spaces in valley, 68 spaces on "forepier")
- Continue special events (Dickens Fair, Festa, private parties, sporting events)
- Retain exhibit space for arts, cultural exhibits
- Retain storage for fishing gear, work area
- Retain staging area for visiting ships
- Retain Pampanito area
- Retain 1,000-sq. ft. office space in Shed A
- Retain public access (informal) along outside aprons of Pier 45

Without the development of the Proposed Project or alternatives at either Pier 45 or Hyde Street Harbor, there would be no change in the existing uses. At the Hyde Street Harbor boats would continue to side-tie and raft to other boats, and facilities for these activities would not be upgraded. No pump-out or restrooms would be available to fishing vessels or operators. Without a convenient 20-gallon per minute pump-out facility, boat operators would need to pump-out vessel heads at Pier 39, the closest facility to Hyde Street Harbor. The potential for illegal disposal of human waste into the Bay without a convenient pump-out in the Harbor, and with the existing portable restroom facilities, would continue to exist.

The existing fueling facility would not be improved to include a new underground fuel delivery pipeline to the fuel dock equipped with an automatic shut off feature and leak detection system. The existing delivery pipeline under the pier would remain to connect to the existing fuel tanks on Jefferson Street. The potential for oil spills in a location in the Harbor that is closest to the Aquatic Park swimming area exists under the No Project Alternative.

Stormwater and urban runoff from the Hyde Street Pier would continue to drain into the Bay under the No Project Alternative, compared with the proposed oil-water separator proposed for the paved area of the Pier.

Public access to the Hyde Street Pier area would not be improved under the No Project Alternative. Night lighting would not be provided.

Transient and oversized commercial fishing boats would continue to raft in the Harbor or side-tie to other boats, making supervision and access to the boats difficult for the Harbor Master. Modern facilities for the commercial fishing industry, such as floating docks that are easily assessable from boats; storage and gear boxes; parking for boat operators; security gates at the foot of the dock for boat safety; and night lighting in the berthing area would not be provided. Unless and until Port could locate an available funding source, flexible skirts surrounding boats in a berth would not be provided and floatable debris from boats and other surface water contaminants would not be contained in the Harbor for the Port's skimmer to collect.

On Pier 45, it is anticipated that the fish handling in Sheds B and D will increase and fully occupy the 140,000 sq. ft. The "valley" would continue to be used by commercial fish trucks.

Prior to the earthquake, Sheds A and C were partially vacant and provided support space for the area merchants, parking and space for special events. Without the development of the Proposed

Project or alternatives, it is anticipated that Sheds A and C would serve to support the commercial fishing activities and would continue to be used for special events, such as the annual Festa Italiana. Transportation impacts associated with the No Project conditions would be similar to existing conditions.

ALTERNATIVE A - HYDE STREET FISHING HARBOR, MAXIMUM EXPANSION

The Maximum Expansion Alternative for the Fishing Harbor and Harbor Services resulted from the 1988 Feasibility Study, discussed in Section II. PROJECT DESCRIPTION. Survey information in 1988 defined future needs of the commercial fishing industry and indicated a need for an expanded facility for fishing boats and the need for a new Harbormaster's Building in the harbor area. The study surveyed 56 marinas used by commercial fishing boats in the San Francisco area and identified a need for 51 permanent and 67 transient berths at the Hyde Street Harbor. The 1988 study assumed that improvements to the Hyde Street Fishing Harbor would meet the needs of transient commercial fishing boats in the harbor.

Survey information in 1994-1995 indicated that the increased need no longer exists therefore this project alternative is not now considered reasonable by the Port staff. However, this alternative has been retained in this EIR for comparison purposes with the Proposed Project. In the event that the needs of the commercial fishing industry return to 1988 conditions in the relatively near future (5-10 years) this analysis could aid in consideration of future expansion of harbor facilities. The facilities for the Hyde Street Harbor, Maximum Expansion Alternative are shown in Figure 19 and briefly summarized below. Table 16 presents the quantity of Bay fill for Alternative A.

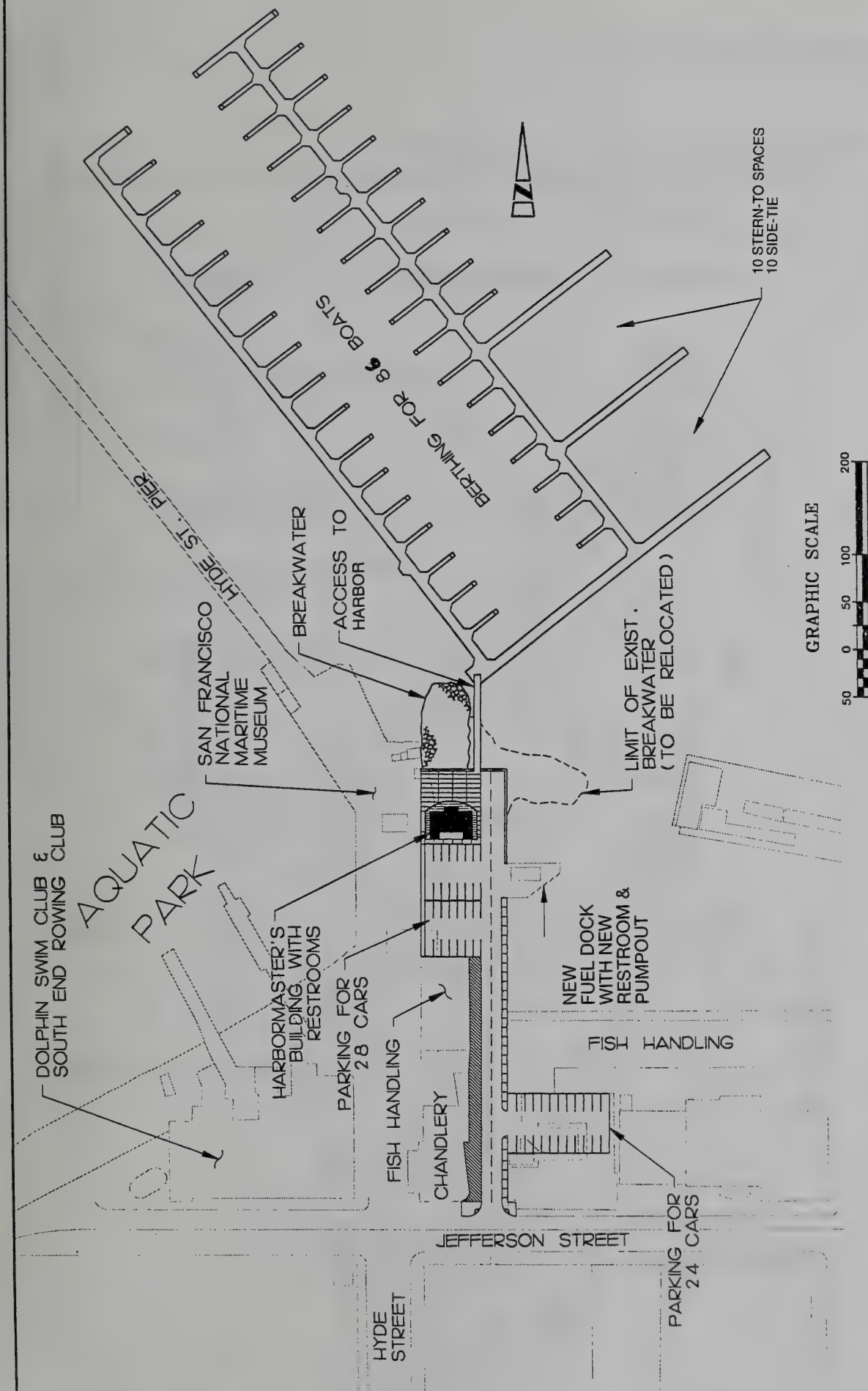
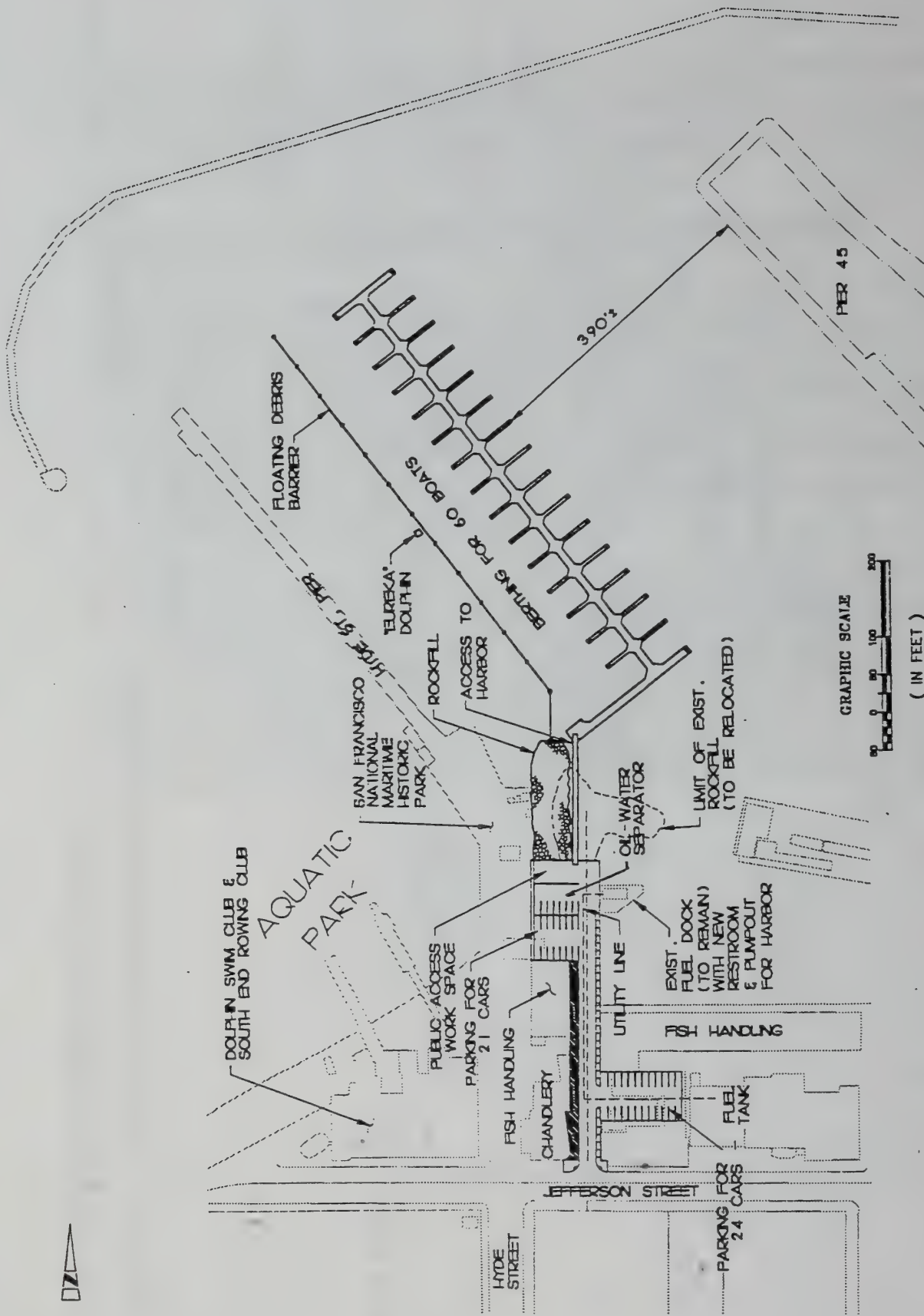


FIGURE NO. 19

(IN FEET)

ALTERNATIVE A - HYDE STREET HARBOR, MAXIMUM EXPANSION

SOURCE: PORT OF SAN FRANCISCO/THE DUFFEY COMPANY



HYDE STREET FISHING HARBOR
Hyde Street Fishing Harbor, Design Option

MOFFATT & NICHOL
ENGINEERS

DATE:
AUG 96

FIGURE

TABLE 16: BAY AND SHORELINE BAND FILL BY BCDC CRITERIA FOR ALTERNATIVES

<u>Description</u>	<u>Proposed Project*</u>	<u>Alternative A</u>
Berthing		
Floats (SF)	17,700	32,150
Piles Supporting Floating Dock (CY)	270	635
Pier (in the Bay)		
Solid Fill (SF)	0	1,000
(CY)	0	282
Pile-Supported Fill (SF)	4,875	20,725
Pile-Supported Fill Removed (SF)	(1,420)	(2,820)
New Pier (in the Shoreline Band)		
Coverage, Solid Fill (SF)	7,150	8,900
(CY)	715	1,175
Pile-Supported Fill (SF)	2,325	3,890
Pile-Supported Fill Removed (SF)	(760)	(760)
TOTALS**		
Coverage/Fill in the Bay (SF)	22,723	54,228
Supporting by Piles (CY)	270	917
Coverage/Fill in the Shoreline Band (SF)	9,475	12,790
Solid Fill (CY)	715	1,175

Notes: * Alternatives B & C involve interior changes to the sheds on Pier 45; would have same amount of fill as proposed project.

** Does not include Fill Removed of 2,180 SF

SF = Square Foot of fill

CY = Cubic Yards of fill

Source: Port of San Francisco, 1996

HYDE STREET HARBOR

- Retain existing 116 assigned boat slips + 14 rafted boats in Fisherman's Wharf Inner and Outer Lagoons (same as proposed)
- Construct new harbor for 116 boats, including 86 floating berths, 10 side tie spaces and 10 stern tie spaces (compared with 60 boat proposed project; 126 piles compared with 53 piles for proposed)
- Construct new fuel dock (compared with use of existing fuel dock)
- 4,100-sq. ft. new Harbormaster's Building
- 32,150-sq. ft. of Bay cover (compared with 17,700 sf for proposed)
- 24 parking spaces approximately 200 feet south of the Pier on former "Bell Smoked Fish" site (same as proposed)
- 28 parking spaces on Pier (compared with 21 spaces proposed)

There were no substantial differences in traffic or parking for this Alternative compared to the proposed project because vehicle traffic associated with commercial fishing boats in the harbor does not occur during peak hours at critical intersections. Based on information in the 1988 Feasibility Study¹ y fishing boats are launched throughout northern California, therefore a one-to-one ratio of vehicles to boats in Fisherman's Wharf harbor is not appropriately assumed. The larger berthing facility would accommodate about 60 more boats than the proposed project. Using the same assumptions about the ratio of vehicles to boats, it is appropriate to assume that not all of the additional boats in the harbor would result in additional vehicles.

Water quality conditions would be expected to remain similar to existing conditions, which is generally within the same range as water quality from nearby parts of San Francisco Bay and in compliance with Basin Plan water quality objectives because no direct relationship has been made between the fishing boats and water quality effects. No differences are identified for water quality between the maximum expansion harbor and the proposed project or no project. Construction of a new fuel dock would reduce the potential for future spills or accidental releases compared with use of the existing fuel dock. There would be short-term water quality effects (increased turbidity and suspended solids) during construction, but following construction conditions would be expected to be in compliance with Basin Plan water quality objectives similar to existing conditions, the No Project alternative, and the proposed project.

¹ Fisherman's Wharf Harbor Feasibility Study, Moffatt & Nichol, Engineers, et al, June 1, 1988.

Alternative A would increase the extent of Bay cover from floating berths by 14,450 sq. ft. compared with the proposed project. The total increase in fill/cover over the proposed project would be 31,505 sq. ft. of cover and 647 cubic yards of fill in the Bay, and 3,315 sq. ft. of cover and 460 cy of fill in the Shoreline Band. The Bay Plan would allow bay fill for water-oriented purposes, such as commercial fishing. Within the Shoreline Band, BCDC's primary criteria for evaluation is maximum public access; Alternative A would provide the same public access as the proposed project.

ALTERNATIVE B - PIER 45 SHEDS A AND C, CONFERENCE CENTER FOCUS

The differences between the Pier 45 Alternatives (B and C) and the Proposed Project are to be found in the interior building design and uses of the pier Sheds A and C. The conceptual design for the Conference Center Focus of the sheds is shown on Figure 20, and is summarized below.

PIER 45 - 205,000 square feet of new uses

- Visitor Center- 0 sq. ft. (compared to 25,000 SF for proposed project)
- Conference Center Focus - 60,000 sq. ft. of multi-functional conference facility and event space to be used for workshops, meetings and conferences, receptions, seafood trade shows, fishery festivals. (compared to 20,000 SF for proposed project)
- Parking - 50,000 sq. ft. (same as proposed project)
- Retail - 40,000 sq. ft., a variety of retail would be available to enhance the financial feasibility of the Center--seafood snack bar, theme kiosks, charterboat services (fish cleaning, packing, shipping); marine arts & crafts, aquaculture displays, books, videos are envisioned. (same as proposed)
- Office Space - 10,000 sq. ft. (same as proposed)
- Outdoor Public Access - 45,000 sq. ft. (same as proposed)
- Pampanito – about 10,000 square feet of Shed A, along the east side, would be used by the National Maritime Museum Association (NMMA) under a lease agreement with the Port for a visitor gift shop and administrative support facility for the Pampanito submarine. The Pampanito would continue to be moored along the eastside of Pier 45 adjacent to Shed A where visitor access is provided along the apron.

Travel Demand: The Conference Center alternative, which does not include the visitor center use as part of the proposed project, but has a greater square footage of conference facility, would be assumed to generate a higher number of vehicle-trips than the Proposed Project. This alternative would generate about 100 vehicle trips during the weekday AM peak hour (compared to 58 for the proposed project), 78 vehicle trips during the weekday PM peak hour (compared to 81 vehicle trips for the proposed project), and 134 vehicle trips during the weekend midday peak hour (compared with 98 for the proposed project). This represents an increase over the

HYDE STREET HARBOR

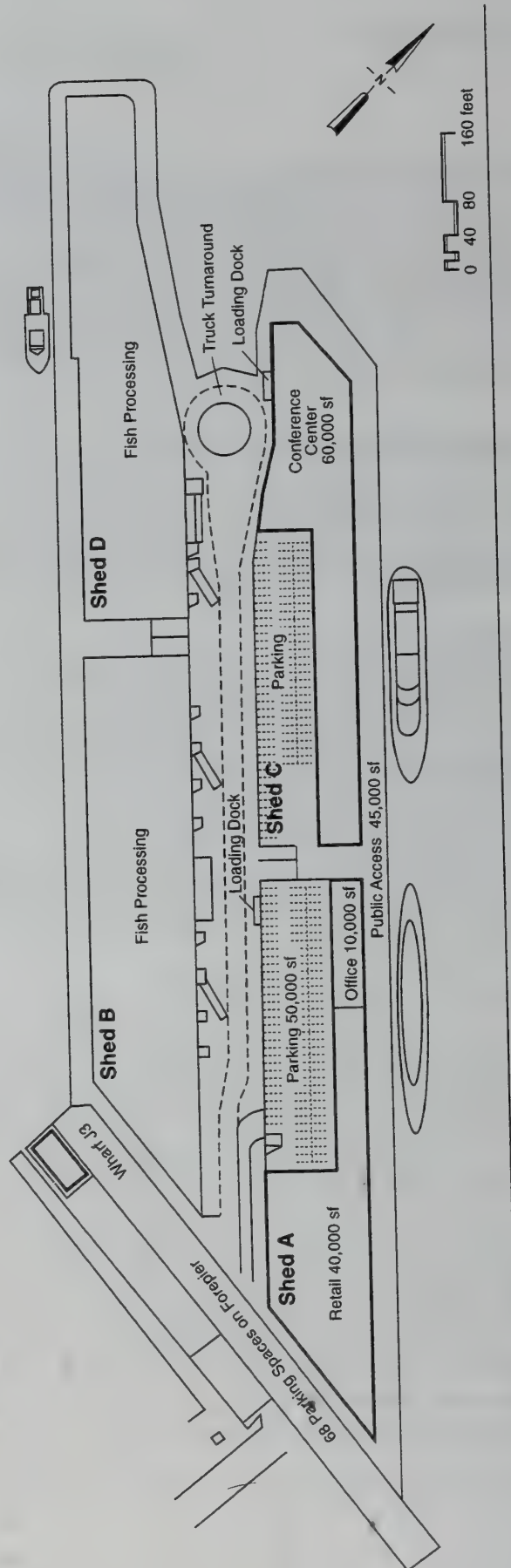


FIGURE NO. 20

ALTERNATIVE B – PIER 45 CONFERENCE CENTER FOCUS

Proposed Project of 36 vehicles during the weekend midday peak hour. During the weekday PM peak hour, the Conference Center Alternative would generate three fewer vehicles than the Proposed Project.

Traffic Operating Conditions: The number of project-generated vehicles was reviewed for the two intersections closest to Pier 45, Taylor and Jefferson Street and Jefferson/Powell/The Embarcadero, to determine the percentage of project vehicles compared to total traffic at the intersection. Under the Conference Center alternative, the project contribution to the total intersection volumes would be less than 10%, except at the intersection of Jefferson/Powell/The Embarcadero, where during the AM peak hour, project trips would account for 23% of total intersection volumes. (See Table 17)

The Conference Center alternative would operate at LOS conditions similar to the Proposed Project. All intersections would operate at LOS B or better.

Transit/Pedestrian Conditions:

The Conference Center alternative would, in general, result in larger number of transit riders than the Proposed Project. During the weekday PM peak hour and the weekend midday peak hour, the Conference Center alternative would generate 107 and 188 transit rider trips, respectively. These trips would be distributed between the existing transit lines, the cable cars and the F-Market line. This represents a decrease of three transit trips during the weekday PM peak hour, and an increase of 53 trips during the weekend midday peak hour. It is anticipated that these trips would be accommodated within the existing and planned transit lines which currently operate with available capacity for additional passengers.

Under the Conference Center alternative, the LOS for conditions for pedestrians at the crosswalks at Jefferson and Taylor Streets would be the same as identified for the Proposed Project. All pedestrian crosswalks would operate at LOS D or better, except for the east crosswalk which would operate at LOS E.

Table 17

Intersection Level of Service -Weekday Conditions
Alternatives to the Proposed Project

Intersection	Cumulative Conditions (Year 2010)											
	Existing (1995)			Proposed Project			Conference Center Alternative			Educational Center Alternative		
	AM		PM	AM		PM	AM		PM	AM		PM
	Delay*	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Jefferson/Taylor	7.9	B	8.2	B	7.4	B	7.4	B	8.4	B	7.4	B
Jefferson/Powell/ The Embarcadero	12.0	B	12.3	B	11.3	B	11.4	B	11.6	B	11.1	B
Beach/Taylor	7.3	B	7.4	B	7.4	B	7.4	B	7.7	B	7.4	B
Beach/Hyde	5.9	B	8.0	B	5.9	B	5.9	B	8.3	B	5.9	B
Powell/Beach	2.8**	A	3.3	A	6.9	B	6.9	B	6.7	B	6.8	B

Intersection Level of Service - Weekend Midday Peak Hour Conditions
Alternatives to the Proposed Project

Intersection	Cumulative Conditions (Year 2010)											
	Existing (1995)			Proposed Project			Conference Center Alternative			Educational Center Alternative		
	AM		PM	AM		PM	AM		PM	AM		PM
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Jefferson/Taylor	10.2	B	8.2	B	9.7	B	10.1	B	11.5	B	11.5	B
Jefferson/Powell/The Embarcadero	14.2	B	12.3	B	13.1	B	13.1	B	13.2	B	13.2	B
Beach/Taylor	7.8	B	7.4	B	8.6	B	8.6	B	8.6	B	8.6	B
Beach/Hyde	8.2	B	8.0	B	8.5	B	8.5	B	8.5	B	8.5	B
Powell/Beach	7.4**	B	3.3	A	8.4	B	8.4	B	8.5	B	8.5	B

Note: LOS operating conditions for cumulative conditions are presented for the revised roadway configuration at the intersections of Jefferson/Taylor and Jefferson/Powell/The Embarcadero

* Delay calculated as seconds per vehicle

** Three-way STOP-controlled intersection under existing conditions only

Source: Kolve Engineering, Inc.

Parking/Loading Conditions: The Conference Center alternative would result in a parking demand of 118 spaces (compared with the proposed parking supply of 200 spaces). Under this alternative the Planning Code requirement would be 260 spaces, and therefore there would be a code shortfall of 60 spaces. Section 161(f) would allow an exemption from parking requirements in the Waterfront Northern Special Use District No. 1. Loading activity associated with this alternative would result in a daily demand of 15 delivery/service trips per day, and a demand for one loading space during the peak and average hours (two loading spaces are proposed).

All other impacts would be the same as described for the proposed project because Alternative B would have the same harbor features as the proposed project.

ALTERNATIVE C - PIER 45 EDUCATIONAL CENTER FOCUS

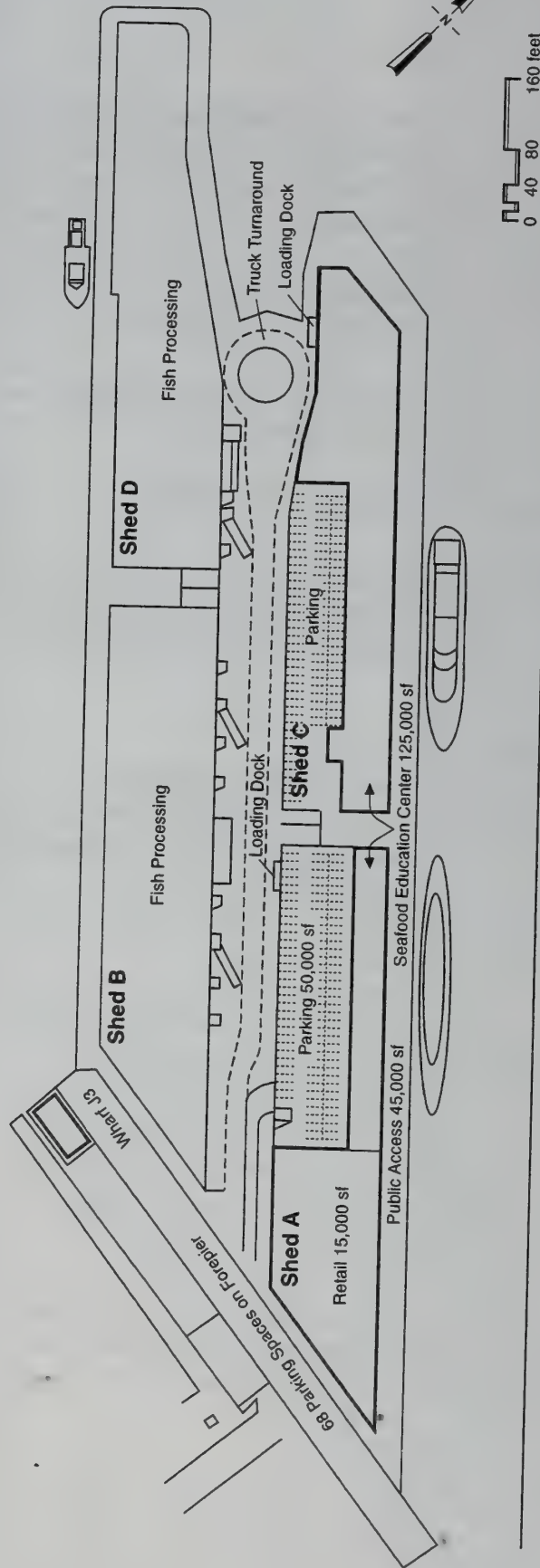
Similar to the Proposed Project use of Shed A and C, and to Alternative B above, the Pier 45 Educational Center Focus Alternative physical changes would be to the interior design and use of the sheds. The facilities for the Pier 45 Education Center Focus are shown in Figure 21 and briefly summarized below.

PIER 45 - 235,000 square feet of new uses

- Education Center - 125,000 sq. ft., a multipurpose facility to serve both the seafood industry and visitors, designed for public viewing and hands-on education to include bilingual fish processing training, seafood inspection, retail marketing, 'in-class workshops', seafood cooking and demonstrations.
- Conference Center - 0 sq. ft. (compared with 50,000 SF for proposed project)
- Parking - 50, 000 sq. ft. (same as proposed)
- Other Retail - 15,000 sq. ft. (compared with 40,000 SF for proposed project)
- Office Space - 0 sq. ft. (compared with 10,000 SF for proposed project)
- Outdoor Public Access- 45,000 sq. ft. (same as proposed)
- Pampanito – about 10,000 square feet of Shed A, along the east side, would be used by the National Maritime Museum Association (NMMA) under a lease agreement with the Port for a visitor gift shop and administrative support facility for the Pampanito submarine. The Pampanito would continue to be moored along the eastside of Pier 45 adjacent to Shed A where visitor access is provided along the apron.

Travel Demand: The Educational Center alternative, which includes predominantly education/visitor use would generate more vehicle-trips than the Proposed Project during the weekday PM and weekend midday peak hours. This alternative would generate only 13 vehicle

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ALTERNATIVE C – PIER 45 EDUCATIONAL CENTER FOCUS

FIGURE NO. 21

SOURCE: PORT OF SAN FRANCISCO/THE DUFFEY COMPANY

trips during the weekday AM peak hour, but would generate 189 vehicle trips during the weekday PM and weekend midday peak hours. This represents a decrease from the Proposed Project of 45 vehicles during the weekday AM peak hour, but an increase of 108 vehicles during the weekday PM peak hour and an increase of 91 vehicles during the weekend midday peak hour.

Traffic Operating Conditions: Under the Educational Center alternative, the project contribution would be less than 10% at both intersections during the weekday AM and weekend midday peak hours, and approximately 15% during the weekday PM peak hour.

The Educational Center alternatives would operate at LOS conditions similar to the Proposed Project. All intersections would operate at LOS B or better. (See Table 17, page 183)

Transit/Pedestrian Conditions:

The Educational Center alternative would result in larger number of transit riders than the Proposed Project. During the weekday PM peak hour and the weekend midday peak hour, the Educational Center alternative would generate 281 transit trips, which would be distributed between the existing transit lines, the two cable cars and the F-Market streetcar line which are anticipated to have available capacity for additional passengers. This represents an increase over the proposed project of 171 trips during the weekday PM peak hour and 148 trips during the weekend midday peak hour.

As under the Conference Center alternative, the pedestrian conditions LOS streets for the weekday and weekend peak hours at the intersection of Jefferson and Taylor would be similar as identified for the Proposed Project. All crosswalks would operate at LOS D or better, except for the east crosswalk which would continue to operate at the present LOS E.

Parking/Loading Conditions: The Educational Center alternative would result in a parking demand of 257 spaces, (compared with 117 spaces needed for the proposed project and compared with 200 spaces proposed) a deficit of 57 spaces. However, the Planning Code requirement of 93 spaces would be met. The Educational Center Alternative would generate a

daily demand of 15 delivery/service trips per day, and a demand for one loading space during the peak and average hours (two loading spaces are proposed).

CHANGES TO PROPOSED USES OF SHEDS A & C

The Port submitted the project description to City Planning, Office of Environmental Review, for the preparation of this EIR in early 1994. The alternatives that are analyzed in the EIR were also developed at that time and included various combinations of uses in Sheds A and C on Pier 45. However, unlike the Hyde Street Fishing Harbor, the ultimate proposed use of Sheds A & C remains undecided.

At the time that the EIR was initiated the Port requested analysis of the Fisheries Center in Sheds A & C as an example of possible high intensity development useful for analysis of potential significant adverse cumulative impacts resulting from development of the Hyde Street Fishing Harbor, in conjunction with the nearby Sheds A & C. However, any final development proposal for Sheds A & C would be made by the Port in consideration of the recommendations of the Pier 45 Advisory Group, a group of community representatives convened by the Port to advise the Port on the long terms uses in Sheds A & C.

The Pier 45 Advisory Group is composed of fishermen, fish processors, Port tenants and leaders of community organizations in the area. In the past months, following the publication of the DEIR, The Advisory Group has worked in unison with Port staff to address the long-standing issues that have precluded the productive use of Pier 45 for nearly 20 years. The Port will not proceed with any long term uses on Sheds A & C until the Advisory Group has made its recommendations. Depending on the final recommendations of the Advisory Group, subsequent environmental review may be required at a future time.

The Pier 45 Advisory Group is working with Port staff to study the feasibility of expanded truck operations in the valley of Pier 45, as well as additional fish processing uses in Shed C. In early June, following publication of the DEIR, the Port requested that the Final EIR address potential development of Sheds A & C as proposed by the Pier 45 Advisory Group. The Feasibility Study, completed in September 1996 (Rajappan & Meyer Consulting Engineers) considered three alternative uses for Sheds A & C. The configuration set forth below was discussed with the Advisory Group and is now considered the Port's Preferred Alternative for Sheds A & C, replacing the Fisheries Center as the proposed project.

Figure 8, page 24 in Project Description, shows the layout of space for this alternative.

<u>Shed A:</u>	Fisheries Center/Event Space	40,000 s.f.
	Office (Pampanito)	10,000 s.f.
	Parking for 108 industry spaces	20,000 s.f.
<u>Shed C:</u>	Fish Processing	32,000 s.f.
	Storage	18,000 s.f.
	Truck Access/Bob Tail turnaround	30,000 s.f.

Due to physical constraints on the east side of the pier, the Port would not allow fish processing space in Shed C to receive fish by boat. Fish would be delivered by truck to the Fish Processing space in Shed C. This alternative would require that Shed C be completely upgraded.

Physical changes that are necessary to accommodate the preferred alternative include the following: an epoxy floor covering; electrical, telephone and potable water systems; sanitary and industrial sewers including a pump station; new roof; demising wall; interior and exterior painting. Physical alterations would also need to be made to allow truck access. These improvements were outlined in a conceptual cost estimates included in the Rajappan & Meyer study noted above, and based on an estimate by Moffatt & Nichol, Sept 4, 1996.

Shed A

- Construct internal separation wall between events/fisheries center area and parking.
- Demolition for and construction of new enclosed fire exits that exit to valley.

Shed C

- Provide new roof.
- Construct new sanitary and industrial sewer system on fill/piles.
- Place bonded concrete paving, polyester concrete and concrete coating to internal floor area.
- New electrical and telephone systems.
- Repair existing windows.
- Provide new roll-up doors.
- Interior and exterior painting and signage.
- Construct internal fire-rated corridor walls.
- Finish and place exterior manddoors, landings, area separation and misc. walls.

In addition, the Port is making repairs to the fendering system on the east side of Pier 45 to accommodate visiting ships. The project is included in the Port's Capital Plan. If fish processing space is created in the future in Sheds A & C, the Port anticipates that shipments will be made primarily by truck given the lack of a breakwater on the east side, thus allowing visiting ships to continue to tie-up on the east of Pier 45.

Employment estimates for 32,000 s.f. of fish processing space, based on average employment of tenants currently in Sheds B & D (average of employee) is 51 employees based on average sq.ft./employee of 565 in Sheds B & D.

Based on the Port's experience with Pier 45, Sheds B & D, the construction period for the preferred alternative would be approximately nine months, of which 50% of the time would be spent on interior improvements. This is based on the estimated construction cost of approximately \$2.0 million noted in the Rajappan & Meyer Report.

The type of construction equipment involved would be: backhoes, hoe-ram, front end loaders, concrete trucks, roofing, equipment, dumpsters, asphalt trucks and paving equipment. (Source: Ed Byrne, Port engineer and project manager for Pier 45 improvements)

The existing truck docks in the 'valley' behind Sheds B & D would be reconfigured to diagonal back-in parking and a truck turn-around area would be added between Sheds B & D (in the shaded area on Figure 20a). Short (Bobtail) truck loading would be provided inside Shed C, with access from the 'valley' via a ramp between Sheds A & C, and a turnaround at the end of Shed C. Two to three semi-truck loading docks would be constructed at the end of Pier 45.

Approximately 108 parking spaces for commercial fishing industry employees would be provided in Shed A, with access to the parking from the 'valley' through a ramp between Sheds A & C.

IMPACTS

The primary difference between this Alternative and the Alternatives for Sheds A & C discussed in the DEIR is the introduction of fish processing into Shed C. Physical changes to Pier 45 would be similar to those discussed in the DEIR for the Fisheries Center, the Conference Center and Education Center Alternatives, with the addition of the floor sinks, industrial sewer system and concrete floor coating for fish processing. Fish to be processed or repackaged would be delivered by truck, not by boat, since there is no direct boat access provided along the east side of

the Pier 45 apron. Impacts, therefore, would primarily be traffic and parking impacts related to trucks and employee vehicles for the fish processing use.

This alternative would generate a total of 4,819 net new person trips per weekday (compared to the 4,940 net new trips for the Fisheries Center proposed in the DEIR). The majority of the trips (about 4,300/day) would be associated with the event space in Shed A, and about 500 daily trips would be associated with the fish processing in Shed C. Peak hour weekday trips would be 438 (compared with 499 for the Fisheries Center Alternative) and peak hour weekend trips would be 615 (compared with 601 for the Fisheries Center).

The addition of a visitor-oriented attraction in Shed A would increase tour bus volumes, although not substantially, since 70% of visitors to a new attraction at Fishermans Wharf are linked to trips that would already be made to the Wharf.

Other impact areas (land use, water quality, marine biology, utilities, public services, air quality/odor, and hazards) would be the same as impacts for the proposed changes to Sheds A & C discussed in the EIR.

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Fisherman's Wharf Restaurant

FISHERMAN'S WHARF--PORT TENANTS

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Mike Lucas
North Coast Fisheries, Inc.

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David Chiu

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Crab Boat Owners Assoc.

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Tarantino's Inc.

IX. SUMMARY OF COMMENTS AND RESPONSES

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A. INTRODUCTION

This document contains summaries of the public comments received on the Draft Environmental Impact Report (DEIR) prepared for the Hyde Street Harbor project and responses to those comments. Also included are staff-initiated text changes.

All substantive comments made at the DEIR public hearing before the City Planning Commission on June 6, 1996 and all written comments on the DEIR received during the public review period from April 26, 1996 to June 10, 1996 are presented herein by direct quotation, edited to delete repetition, nonsubstantive material, and those comments that are not directed at the EIR.

Comments and responses are grouped by subject matter and are arranged by topics corresponding to the Table of Contents in the DEIR. Each group of comments is followed by its set of responses; the order of the responses under each topic follows the order of the comments. As the subject matter of one topic may overlap that of other topics, the reader must occasionally refer to more than one group of comments and responses to review all information on a given subject. Where this occurs, cross references are provided.

Some comments do not pertain to physical environmental issues, but responses are included to provide additional information for use by decision makers.

These comments and responses will be incorporated into the EIR as a new chapter. Text changes resulting from comments and responses will also be incorporated into the EIR, as indicated in the responses.

B. LIST OF PERSONS COMMENTING

WRITTEN COMMENTERS

Sharon Lee Polledri, Director of Planning & Development, Port of San Francisco (written comments dated June 5, 1996).

Julie Marcus (written comments dated May 28, 1996)

Wilhelmina Sijsling (written comments dated May 29, 1996)

Robert N. Miller, President, Crab Boat Owners Association (written comments dated May 25, 1996)

D. Bibeau, Commander, U.S. Coast Guard, (written comments dated May 23, 1996)

Arthur Feinstein, Program Coordinator, Golden Gate Audubon Society (written comments dated May 23, 1996)

Judy Irving IDG Films, (written comments dated May 22, 1996)

Lisa McCally, (written comments dated May 22, 1996)

Daniel Macchiarini, S.E.R.C. member, (written comments dated May 20, 1996)

Laura Burtch, (written comments dated June 2, 1996)

Elizabeth A. Z. Schiff, (written comments dated June 3, 1996)

David Zovickian, President, Dolphin Swimming and Boating Club, Inc. (written comments dated May 31, 1996)

Nicholas Salcedo, Coastal Analysts, San Francisco Bay Conservation and Development Commission (written comments dated June 7, 1996)

Joseph LaClair, Bay Design Analyst, San Francisco Bay Conservation and Development Commission (written comments dated August 12, 1994)

Christopher Martin, The Cannery (written comments dated June 10, 1996)

Leslie Anglim, (written comments not dated received June 10, 1996)

IX. Summary of Comments and Responses
B. List of Persons Commenting

David Behar, Executive Director, The Bay Institute of San Francisco, (written comments dated June 10, 1996)

Linda M. Sheehan, Pollution Programs Manager, Center for Marine Conservation, (written comments dated June 10, 1996)

William G. Thomas, Superintendent, San Francisco Maritime NHP, U.S. Dept. of the Interior, (written comments dated June 10, 1996)

Kathy Lohan, Executive Director, The National Maritime Museum Association, (written comments dated June 7, 1996)

Laura Taylor, President, South End Rowing Club, (written comments dated June 10, 1996)

Margaret Reilly, Attorney for Concerned Citizens and Users of Aquatic Park and Friends of Aquatic Park, and Roger Beers, Attorney for Dolphin Club, (written comments dated June 10, 1996)

Dr. Douglas A. Segar, Director, Institute of the North, (written comments dated June 8, 1996)

Sue C. Hestor, Attorney at Law, (written comments dated June 10, 1996)

Maggie Hallahan, Aquatic Club member (written comments dated June 7, 1996)

Alice Watts, NaWahineoke - Canoe club (written comments dated June 5, 1996)

Robert Blum, Aquatic Club (written comments dated June 11, 1996)

Joanne Wilson, Planner San Francisco Recreation and Park Department (written comments dated June 18, 1996)

M. Toby Levine, (written comments dated June 16, 1996)

PUBLIC HEARING (VERBAL) COMMENTERS

Michael LaRocca

Lawrence B. Martin

Jeannette Caito

Mike Berline

Tom Creedon

Phil Betiveгна

Chris Martin

Alessandro Baccari

Bob Miller

Kathy Lohan

IX. Summary of Comments and Responses
B. List of Persons Commenting

Susan Alexander

Zeke Grader

Margaret Reilly

Aaron Peskin

Megan Sullivan

David Zovickian

John Beale

Jeanine Dubois

Wilhemina Sijlsling

David Kennedy

Sue Hestor

John Rohosky

Ken Coren

Laura Burtch

Kelly J. Hayden, Commissioner

Esther Y. Marks, Commissioner

Arnold Baker, Commissioner

Beverly J. Mills, Commissioner

Hector J. Chinchilla, Commissioner

IX. Summary of Comments and Responses
C. Comment and Responses
1. General Comments and Letters on the Proposed Project

C. COMMENTS AND RESPONSES

1. GENERAL COMMENTS AND LETTERS ON THE PROPOSED PROJECT

General comments on the proposed project were expressed in comment letters and in testimony at the Public Hearing by representatives of the commercial fishing industry (fishermen and fish processors and wholesalers), and local merchants. Many of these comments require no response because they are not specific comments on the EIR. Because these comments provide information that helps to clarify the purpose of the project they are included in this Comment and Response Section. Comments clarifying the need for the proposed fishing harbor follow.

Comments

“Our ability to provide fresh fish all year is dependent on fishermen bringing their catch to San Francisco from one season to the next. Right now, salmon is in season, the bite is on, but the bite is on south of Half Moon Bay. That's where the fish are, that's where the boats are. When the salmon will be here, the boats will be here. That goes for all the seasons .

Sword fish season is next. When the fish are close to the harbor, the boats will be here. The same goes for the crab season; the boats will come for the opening of the season, and two weeks later, they are gone, except for the local fishermen .

Herring season boats come from the whole Pacific Coast to fish this resource, but when the season is over, again, the boats leave. When the fish are here, the boats are here . San Francisco deserves a modern fishing harbor. I've made a major investment in the wharf .

I feel that if the Hyde Street Harbor is not built, my investment will be in jeopardy, as well as the whole fishing industry. I urge you, my family urges you, to please support the fishing industry and build a new state-of-the-art fishing harbor.” (Michael LaRocca, verbal comments)

Summary of Comments and Responses

C. Comment and Responses

1. General Comments and Letters on the Proposed Project

"I personally support the project. The premise of the complaint is wrong. We are not introducing a fishing industry into the same water we swim in. The fishermen are already there and were there before us. What we are doing is fixing the mess over there. For example, yesterday the wind came up and there were around 30 fishing boats tied up helter skelter in the outer lagoon with no water, no power, no toilets, no pump-out facilities, no skirts and so forth. Fishermen belong in Fisherman's Wharf. San Francisco has the obligation to provide them with proper sanitary berthing. That is what this project is about. That goal would seem above reproach. It was the position of the previous South End Rowing Club board to support this project. I hope it will be the position of the new board." (Mike Berline, verbal comments)

"San Francisco has regained its spot as the center of the Bay Area fishing industry. But while the processing facilities are great, the harbor berths are simply not adequate to meet the needs of the San Francisco fishing industry. Over the past 20 years, we have lost many of our fishing boats to other harbors because of the facility, and I think with these new berths at Pier 45, it would really be a first-class processing plant." (Phil Betivegna, verbal comments)

"A survey title analysis of economic impact for the commercial fishing industry on the City and County of San Francisco dated August 30, 1989, authored by Patrick Flannegan and others, studied the economic contribution to Fisherman's Wharf and the City of the commercial fishing industry. It also projected additional economic benefits to the City if an adequate harbor and facilities had been built at Fisherman's Wharf during the same year. The report cites a number of Department of Commerce studies that calculate for every dollar of fish that is landed in the Port, two to three times its value was attribute to the local economy. It also cites that for every commercial fisherman you send to sea, there are eight or more jobs that are created on land. The report estimates that with a modern facility, as identified in the EIR, fish landings would increase by about 33 percent. Direct jobs generated by the industry would also increase by a similar percentage, creating about 150 new jobs with the fishing fleet and fish handling. It would also provide an estimated 200 indirect jobs that the industry would support." (Chris Martin, verbal comments)

Summary of Comments and Responses

C. Comment and Responses

1. General Comments and Letters on the Proposed Project

Note: The above information regarding the creation of jobs and economic benefits is noted, however, CEQA does not require an EIR to evaluate social and economic effects of a proposed project, unless they relate to a physical change in the environment (such as, causing growth and increased demand for water). The validity of the above referenced report for current conditions is uncertain since the findings of the report were based on projections made using 1987 data. Factors that cannot be controlled influence the fishing industry, such as, changes in regulations that effect the length of fishing seasons, fishing quotas, and of course the supply of fish which can fluctuate greatly.

"The preservation and expansion of the commercial fleet and the associated fisheries is, as you know, a top priority of the Waterfront Land Use Plan mandated by Proposition H. The fact that the rehabilitated pier and the associated fish handling facilities have been so well received is certainly a credit to the Port and to the associated fishing fleets." (M. Toby Levine, written comments)

"First, it should be clearly understood that the Hyde Street Harbor project is and will be sorely needed at the size now proposed if the fishing industry is to thrive and continue its regeneration. With continued high level support by the Port and the City, Fisherman's Wharf will, I believe, once again be a major fishing port on the West Coast." (R. Miller, written comments)

"My family's company, Caito Fisheries, has been landing fish in San Francisco for over 100 years. Last year, we moved back to Fisherman's Wharf for the first time in decades. Our family invested hundreds of thousands of dollars into a new fishing receiving facility at Pier 45 . San Francisco should be very proud of the modern, state-of-the-art facility at the pier. It is truly one of the Nation's finest commercial fishing facilities .

Our company would not have made this type of investment that we have made in Fisherman's Wharf if we weren't confident in the pier's future as a center of Northern California fishing, commercial fishing industry .

Caito Fisheries is supportive of the building of a Hyde Street Harbor. While San Francisco fishing industry is backed on solid footing, a serious problem still exists. The wharf currently

Summary of Comments and Responses

C. Comment and Responses

1. General Comments and Letters on the Proposed Project

has the worst berthing facilities in Northern California. Other competing harbors have improved the berthing facilities, while ours remain old, unsafe and inadequate. We constantly hear from fishing boats, from which we buy fish, that the wharf does not provide adequate berthing facilities. During busy receiving time, fishing boats have to raft three or four boats deep, which causes damage to boats and makes boat security more difficult. Our business depends on attracting fishing boats to Fisherman's Wharf to sell their catch. While modern receiving facilities are now available at the wharf, the industry desperately needs new berthing that the Hyde Street would provide to ensure San Francisco continues to attract a regular supply of fish.”
(Jeannette Caito, verbal comments)

Summary of Comments and Responses
C. Comment and Responses
2. Project Description
a. Objectives of the Project Sponsor

2. PROJECT DESCRIPTION

a. Objectives Of The Project Sponsor (Need For The Project)

Number of Boats in the Harbor—Will the Project Attract More Boats?

Comment

“First, the DEIR assumes that the vessels which would be accommodated by the new berths are those vessels which are now “side-tied or rafted” in the harbor. In fact, such side-tied or rafted vessels are mainly transients only occupying the space in the harbor for brief periods between fishing forays primarily during the herring season and do not occupy the harbor on any regular or continuous basis. ...there is no evidence in the DEIR to support the assumption that such transient side-tied and rafted vessels will in fact rent the new berth space upon completion of the Project, particularly at new higher rates. They pay nothing currently. What would prevent such vessels from continuing to side-tie or raft in the harbor on a seasonal basis when the new berths are rented to recreational boats? And even if evidence in the DEIR shows that there are a sufficient number of such boats to fill the proposed number of new berths. We believe that the facts would show that there are an insufficient number of existing commercial fishing vessels to fill the proposed new spaces.” (Laura Taylor, written comments)

“The existing facilities for the commercial fishing industry is sufficient. Looking at the current situation there are open berths now. There are also numerous boats which are not working boats at all. These spaces could be cleared to make room for additional boats if there even are any that need a harbor. The commercial fishing industry in San Francisco has changed dramatically. The biggest catches are those brought down in the trucks from Washington state which the Sunrisers see blocking the flow of traffic at 6:00 a.m. Mike Berline, in his point #20 from 1990, recognized that only 7 to 12 boats have left over the years to other ports such as Sausalito or Oakland and it is not anticipated that more boats will come if this project is built. The Port gave us a presentation of the project two weeks ago showing the need for more space due to “rafting”

Summary of Comments and Responses
C. Comment and Responses
2. Project Description
a. Objectives of the Project Sponsor

of boats next to each other. Those boats are herring boats and are only here for limited days for that season. Some of the first tier of boats the others were rafted to were not working anyway. Does the Port really want to risk the destruction of water quality, environment and wildlife with such a big project such as a new harbor to accommodate a waned fishing industry and to per chance bring back 7 to 12 boats? The Port admitted this is not even an income producing project for them.” (Lisa McCally, written comments)

“SERC's concern is that the DEIR is inadequate and fundamentally flawed because it is based on the false remise that the project will not generate increase used of the harbor. The DEIR fails to consider the host of impacts which must be considered. Therefore the DEIR should not be adopted or certified by the City.” (South End Rowing Club, written comments)

Response

The Port maintains that the existing berthing facilities at Fisherman's Wharf are not sufficient to sustain the fishing industry in San Francisco. Fishing industry representatives expressed a need for modernized facilities at the EIR Public Hearing. The fish processing facilities on Pier 45 have been modernized and the tenants have expressed satisfaction with the results. However, the current berthing facilities are the same type that were in use over 100 years ago. They are undersized for some of the larger fishing boats and boat operators must climb ladders to access boats. Other commercial harbors or marinas use floating berths. The Port must also provide a modern facility if they are to be competitive and committed to retaining the fishing industry in San Francisco.

In terms of harbors, a 60-berth harbor is not considered a large project. Most new marina and harbor facilities are built with hundreds of berths, such as the 350 berths built at Pier 39 or the 500 berths built at South Beach. With the addition of 60 berths and side-tie spaces the Hyde Street Harbor would have a total of 176 boat spaces.

Summary of Comments and Responses

C. Comment and Responses

2. Project Description

a. Objectives of the Project Sponsor

In 1988 a feasibility study was performed by Moffatt & Nichol, AGS and Kwan Hemni which also drew on commercial fishing industry information prepared by Port consultant, Carol Brown. The conclusion was that a need existed for 51 permanent and 67 transient berths to serve the commercial fishing industry. This study defines an outer limit of demand for the harbor, based on commercial fish landings in San Francisco since 1988.

This study determined a need for 116 new berths which has turned out to be overly optimistic given more recent trends in the industry. At the time of the 1988 study, San Francisco fish landings were 21.8 million pounds. Yet in the intervening years, fish landings decreased and reached a historical low of 7.4 million pounds in 1994. In this period, the number of commercial fishing boats also declined. For example, per the Fisherman's Wharf Crab Boat Owners Association, there were only 14 active crab boats at Fisherman's Wharf for the 1994 season, down from over 50 boats in 1990. (*Source: Port Internal Memo from J. Davey to D. Hodapp, 5/16/96*).

While there has been a recent 1995 increase in fish landings at Fisherman's Wharf since the lease-up of the fish processing space on Sheds B & D, the increase is modest compared to 1988 data. The volume of fish landings represented in the 1988 data still represents an upper limit of growth which is not anticipated to be repeated because of the new fish processing activity in the renovated Sheds B & D or the proposed improvements to Shed C. (See page 11 of the EIR, Table 1, for a five-year history of SF Bay Area Commercial Fish Landings).

To the extent that the renovated fish processing facilities may attract new boats, Mike La Rocca of A. La Rocca Seafood has indicated that several boats that previously used the harbor had returned to the Wharf after the completion of the Pier 45 renovation. The proposed floating docks and increased berth space, in and of itself, is not assumed to attract new boats to Fishermans Wharf, nor will new fish processing space proposed for Shed C generate a significant number of new

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berthing needs since boat access to the east side of the Pier is not feasible. The volume of fish handled and processed at Fishermans Wharf is increasingly brought in by truck, not by boat.

Although the harbor would give priority to commercial fishing vessels, in the event they do not fill the entire harbor, there is sufficient demand by recreational boats to fill any remaining berths. Financial responsibility dictates that new Port projects be feasible. Since the commercial fishing industry is cyclical and different fishing seasons cause fluctuating demand for transient berths, having the ability to fill vacancies with recreational boats helps the financial feasibility of the harbor.

Through increased management of the new harbor, the Port would encourage transient boats that currently side-tie to use the proposed harbor. While the policies have not yet been developed, the project provides for additional personnel. The new harbor master and the increased staff would be in a better position than at present, to enforce harbor regulations and to permit rafting and side-ties on an as-needed basis rather than as currently practiced. The Port would manage the use of the harbor under existing Terminal Tariff, Rule No 34, Section 8, which state that "commercial fishing vessels, historical commercial fishing vessels and fishing party boats shall be given priority over pleasure boats."

Comment

"If the new berths are constructed, will they be filled by commercial fishing boats as is the stated Project Objective or will recreation and pleasures boats be the primary users of the new spaces? Obviously, the nature, purpose and objectives of the Project would differ greatly depending upon the answer to this question. If, as the DEIR states, due to the seasonal nature of the commercial fishing industry, "recreation boats" will have the opportunity to temporarily use these spaces (DEIR, page 2), the DEIR must identify the extent to which this will occur particularly in light of

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the decline in the number of commercial fishing boats in the Harbor. If the Project will ultimately be occupied predominantly by pleasure craft, the fundamental nature of the Project would not be for commercial fishing uses and the stated objective would be inaccurate. Such a fundamental change in the Project would result in a host of additional environmental impacts to be considered as well as additional land use planning issues and permitting requirements and approvals, including Proposition H and M and the provisions of the Northern Waterfront Special Use District that are designed to protect the maritime character of the Project area, all of which must be considered in the DEIR.”

“So, if contrary to the DEIR's stated assumption, the new berths will not be filled by the existing side-tied or rafted fishing vessels, it follows that such berths will be occupied by other types of boats which by any analysis would result in the generation of new and increased uses of the harbor by pleasure and recreational boats. The DEIR is required to evaluate the impacts of such potential new and increased use of the harbor.”

“If there are not or will not be a sufficient number of commercial fishing vessels to fill the new spaces, the DEIR is required to evaluate the impacts of any alternative users.” (Laura Taylor, written comments)

Response

The Port's stated objective of the proposed Hyde Street Fishing Harbor is to berth fishing boats. To help insure that pleasure craft would not be the primary users, the Port charges pleasure craft a higher berth rate. The Port's Tariff, Rule No. 34, Section 8, also gives fishing boats priority to berths, and the size of the proposed harbor under the preferred alternative would contain 60 total berths, designed to meet the fishing boat demand.

Upon opening, the Port expects the 60 berth Hyde Street Fishing Harbor would be used by fishing boats from 50% to 100% of the time, depending on the time of the year, with an average throughout the year of roughly 70%. This would leave some

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room for growth as improvements at Fishermans Wharf attract the return of fishing boats from other harbors in the region. As this growth takes place, fewer pleasure craft would have access to the Harbor. The Port provided by the following table in response to a request for estimates of current harbor use and projected future use.

HYDE STREET HARBOR FISHING BOAT DEMAND

Type of Berth	Fishing Boats Current Demand	Number of Berths	Percent Occupied
Permanent Berth (year round)	25	40	
Transient-Herring Season (Dec-Feb.)	35	20	
Peak Season Subtotal	60	60	100%
Permanent Berths (year round)	25	40	
Transient-Summer Season (June-August)	18	20	
Summer Season Subtotal	43	60	72%
Permanent Berths (year round)	25	40	
Transient-six months	6	20	
Non-peak Subtotal	31	60	52%
Permanent Annual Average	25	40	
Transient Annual Average	16	20	
Total Annual Average	41	60	69%

Source: Port of San Francisco, October 1996

Comment

“The Project Objective for the Harbor Expansion is flawed. CEQA requires the Project description to set forth the objectives sought by the Project (CEQA Guidelines, §15124(b)). The DEIR states that the objective of the Port’s proposal “to construct a new 60 space floating dock harbor to add to the existing 116 berth (99 berths and 17 side-tie spaces) commercial fish harbor at Fisherman’s Wharf...” is to “*accommodate the unmet demand for berthing of the existing commercial fishing industry**(emphasis added)...” (DEIR, page 1).”

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This "unmet demand" is not adequately documented in the DEIR and cannot be demonstrated. In support of the stated objective the DEIR states that "... the Port *believes* that the existing facilities at Fisherman's Wharf and Pier 45 are insufficient to meet both existing and future fishing industry needs" (DEIR, page 2) and that existing facilities are insufficient to "accommodate the unmet demand for berthing of the *existing* commercial fishing industry ... " (EIR page 1, but fails to set forth the facts upon which the Port bases such belief). To properly evaluate the proposed Project this "unmet demand" must first be quantified and analyzed in order to demonstrate how the Project was designed to meet this demand.

How many commercial fishing boats occupy berths in the existing harbor facility? If all "non-qualifying boats are removed from the existing harbor how many new spaces would be created? What demand for new berths is created by rafted, side-tied and longer, overhanging boats? How many "longer boats" overhang their existing berths? How often are 40-plus boats rafted and 12 to 14 boats side-tied? Is this a seasonal phenomenon? What type of fishermen raft and side-tie? Do they demand berth space?

The DEIR fails to note the length of stay of these boats, many of which do not even overnight in the harbor. How many of the rafted and side-tied boats are transient, out-of-state and temporary users? The seasonal nature of the fishing industry must be set forth and analyzed.

"Are the herring boats and other seasonal boats referred to in the DEIR and Initial Study (DEIR page A-3) expected to lease the new marina berths or would they, as transient, mainly out-of-state, temporary users, continue to raft up to other boats and side-tie? Is there any information to support the claim that the alleged 40-plus rafted and 12-14 side-tied boats would actually lease berths in the new marina? Have any current studies, economic analyses or market tests been performed which assess the economic viability of the proposed new berths in light of the fact that they will be considerably more expensive than the existing berths?

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What are the main charges for the existing harbor facilities? At these higher rates is there sufficient commercial fishing industry demand to fill the new harbor? The marketability of the new harbor must be demonstrated." (Laura Taylor, written comments)

Response

In 1988 a detailed feasibility study was undertaken by the Port and Maritime & Coastal Engineers which projected the need to build a Harbor with a total of 134 berths. Based on the work that actually occurred in the harbor since the 1988 study the projections proved to be on target. The Port has not constructed another 11-berth study of Bay area fishing harbors. However, based on a combination of local market analysis and the practical hands-on experience of Port personnel, the Port believes that a 60 berth harbor is needed to meet the near term demand of the fishing industry. Port Memo from J. Harvey to D. Hordage on May 16, 1996. Study: Drive Harbor Fishing Boat Demand August 1996.

Tonnage rates are expected to ease berth in the new Harbor. The higher monthly berth rate of the new Harbor estimated at \$4.15 per linear foot is in line with the rates charged at other harbors which serve fishing boats. Spud Point in Europe charges \$4.10 and Pinar Point in East Moon Bay which charges \$5.10. Some modern working harbors are the norm at other harbors, rates of \$4 to \$6 per linear foot are commonly paid by fishing boats. Also, the proposed berth rate for the Hyde Drive Harbor is well below the rate of nearby harbors that cater to pleasure craft. Port 15 Marina is \$7.75 per month per linear foot and South Beach Marina is \$7.40.

Given a rate for fishing boats which is considerably less than other nearby harbors and the fact that the new Harbor will provide an up-to-date working system similar to other harbors with floating docks for easy access, secure entry to the water, electricity, a pump-out, convenient access to the Golden Gate to get to the fishing grounds and in the first projection on Port 15 the proposed 60 berth

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facility is the appropriate size for the anticipated demand. The proposed Harbor has been designed to accommodate larger berths for commercial fishing vessels. Typical berths vary in length from 40-50 feet.

The monthly rate for the existing berths in the lagoons for fishing boats ranges from \$1.00 to \$2.00 per linear foot, and for pleasure craft the rate is \$3.50. Berth holders receive very few services for this low rate, such as access by means of climbing up and down a ladder, less secure berths, and tying-up to a pile rather than a cleat in a floating slip.

Comment

"The DEIR contains no information addressing the Project's current economic characteristics (CEQA Guidelines §15124(c)).

In light of such dramatic changes, the 1988 Study is obviously not relevant to the currently proposed Project and a current economic analysis must be accomplished and considered in the DEIR to demonstrate the existing and future demand for new berthing spaces for commercial fishing boats." (Laura Taylor, written comments)

Comment

"Nearly all commercial fishing facilities in Oakland and Marin County have shut down, leaving San Francisco the only game in town (the whole Bay Area). The Seafood Producers; Cooperative, a fishermen owned co-op, has come to California and is now headquartered at Morgan fishing Pier 45, bringing fish from all over the state to the wharf for processing and distribution. There are approximately eight salmon trollers in the co-op in this first year of California operation and the indications are that the number will probably double (or more) next year. Several fishermen from the wharf are members of the co-op. When the fish and the fishing move north, probably in early June, many if not most of these co-op boats will be operating from San Francisco. They will need the facilities that the project will provide. The economic benefits

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are obvious. The City and the Port, as well as the processors and those who deal with them will prosper. It is also highly likely that the co-op will be in the dungeness crab and black cod businesses later this year.” (R. Miller, written comments)

Response

The fisherman owned co-op was formed in 1996 and is using the fish processing space of an existing tenant in Shed B on Pier 45, Morgan Fish. The fish processing facilities in Oakland and Sausalito closed after this EIR was initiated. Thus, this information was not available when assessing demand for the harbor, and any increase in boats because of the fisherman’s co-op is considered by the Port to be speculative since the co-op has been in operation less than one year.

Comment

“The project has been trimmed down to 60 berths. There is now, and will be in the foreseeable future, a need for more and larger berths. Because of the reasons stated above and some other causative factors not necessary to state here, the fishing fleet and fishing activities are growing and will continue to grow at the Wharf if the facilities are there to accommodate the operations. Indeed, the processors who have made such a significant commitment and investment in their new facilities need, and I believe are counting on, the completion of this project.” (R. Miller, written comments)

Response

As fishing industry uses increase at Pier 45, it is conceivable that activity could reach the outer growth limit represented by 1988 SF Fish Landings. In that case, the demand for the harbor would be 118 spaces, as analyzed in the Moffatt & Nichol Study. The original 88 berth harbor alternative is analyzed in this document (page 177, Alternative A-Hyde Street Fishing harbor, Maximum Expansion). As with the proposed harbor, no significant environmental impacts are identified for Alternative A.

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Comment

"Page 1 refers to the Burton Breakwater built in 1986 and also make reference to the Port's objectives for the harbor. Please list another objective for the harbor improvements as fulfilling an agreement with the federal government. This stems from the Agreement between the United States of America and the City and County of San Francisco, dated November 13, 1984, relative to federal funding for the breakwater. Among other provisions, this Agreement sets forth that the City and County of San Francisco "shall provide and maintain adequate berthing areas", as well as "provide guidance and leadership to encourage the development of onshore facilities necessary to support the commercial fishing industry at Fisherman's Wharf, including the development of additional fish-processing plants." Under this Agreement, the City and County of San Francisco have a contract with an obligation to the federal government to develop additional berthing and modern processing facilities. The basis for the Congressional action authorizing funding for the breakwater project was the future development of an adequate fishing harbor and facilities.

Page 2 makes reference to the inadequate and run-down harbor facilities at Fisherman's Wharf. The California State Coastal Conservancy published a report titled "Commercial Fishing Facilities in California," dated August 1984, which surveyed the lack of facilities at Fisherman's Wharf. In that report all of California's fishing harbors were analyzed. Despite the fact that Fisherman's Wharf had more handlers and distributors than any other of California's 26 ports accommodating commercial fishing boats, its harbor and support facilities were the most inadequate in the state, lacking berthing, gear storage, waste disposal sites, haul-out facilities, and direct, secure access to vessels. Though the new, state-of-the-art fish handling facilities on Pier 45 are a considerable improvement, the harbor itself still is a sub-standard fishing port with 19th Century infrastructure." (Christopher Martin, written and verbal comments)

Response

Comment noted. The above information supports and further clarifies the description on page 2, paragraph two, of the EIR, under Objectives of the Project Sponsor.

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Comment

“However, it has recently become apparent that the expansion of the Hyde Street Harbor is intended to provide berthing space as much or more for pleasure craft as for additional fishing boats. Indeed, the Dolphin Club has been advised that Cal Boating's role in the financing of the Project has been made dependent on occupancy being made available for recreational boats. This fact was confirmed in a telephone conversation between a representative of the Dolphin Club and Dan Hodapp of the Port. (Margaret Reilly and Roger Beers, written comments)

“By contrast, the Port's Draft Waterfront Plan would allow recreational boats to co-occupy the existing and new berths since the traditional fishing fleet is experiencing economic set back and, presumably is diminishing. We understand that few, if any, of the "rafted up" commercial vessels currently pay rent to the Port. What is the likelihood that these vessels would begin paying rent and occupy new berths? Would nonpaying vessels be allowed to remain "double stacked" and rafted up, or would they be evicted? What is the predicted volume of vessels using the project area on a temporary basis, and what operating procedures would apply to manage this vessel traffic? How many of the estimated 500 herring boats would be permitted to use the project area and under what operating procedures? Would the Port's operating procedures continue to permit chronic patterns of overcrowding?” (Margaret Reilly and Roger Beers, written comments)

Response

Based on the Port's field survey and estimate of demand, it is anticipated that the majority of berths would be occupied by commercial fishing boats at least six months of the year under existing demand, and longer as fishing boats return to lease space in the Harbor. (See above table C&R pg 14, Hyde St. Harbor Fishing Boat Demand, October, 1996).

Thus the Port would follow its existing Terminal Tariff, Rule No. 34, Section 8 which states that “commercial fishing vessels, historical commercial fishing

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vessels and fishing party boats shall be given priority over pleasure boats”. The Tariff also states that “pleasure boats will only be accommodated to the extent that berths are not occupied by commercial fishing vessels, fishing party boats or historical commercial fishing vessels and, in addition, that there are no commercial fishing vessels, fishing party boats or historical commercial fishing vessels on the waiting list”. Therefore, Hyde Street Harbor is intended to serve fishing boats, not pleasure craft. If recreational boats were to lease space from the Port, they would be subject to the same rules and management policies as fishing boats. Potential impacts would be similar to those discussed in the EIR for fishing boats.

The permanent berths would consist of finger floats varying in length from 40-50 feet in a double berth configuration. These permanent berths would be leased on a monthly basis. Transient berths would consist of 500 linear feet of stern-to mooring to accommodate 10 boats with a bow line on the floating dock and a stern line to a mooring pile; and 800 linear feet of side tie docking to provide flexibility in accommodating roughly 10 transient and oversized vessels. Transient berths are typically leased for a period ranging from a portion of one day to several days.

As described in the response above, the Port’s leasing prices at Fisherman’s Wharf would be competitive with other harbors in the Bay area, and because the Wharf serves as the major hub of activity for fish trading, fish processing and restaurant business, Fishermans Wharf is expected to continue to attract commercial fishing boats. With the proposed improvements, boats that come to the harbor to unload fish at the Pier, are anticipated to be prime candidates for use of berth space.

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Comment

“Page 1 - please explain why side tie and rafting are allowed at all. Will this be prohibited if project is implemented. Also please explain configuration of inner and outer harbor docking when project complete. It doesn't come through here. Show area where current side tie and rafting on map of current conditions.

Page 2 - Why does Port believe existing facilities are insufficient to meet existing and future commercial fishing needs?

-“there may be time” recreation boats. Please quantify in time and number. What types?

-“parking for boat operators” at Hyde Street - how will this be regulated so that it is not abused by others?

-at least once in text it would be helpful to give geographic ID for Piers A & C - east side of Pier 45.

Page 3 - last sentence - parking for whom? (Sue C. Hestor, written comments)

Response

The aerial photograph shown in Figure S1 on page S-3 of the EIR is the best depiction of actual boats in the Harbor. Boats are ‘side-tied’ when the side of the boat parallels the floating dock or pier that it is tied to. Boats are stern tied when the bow of the boat is tied to the floating dock. Rafted boats are anchored out in the Harbor. Use of the Harbor by commercial fishing boats is seasonal, directly related to fishing seasons. (See table on page 14 of C&R regarding the number of permanent and transient boats in the harbor). Transient boats are in the Harbor for short periods of time, depending on fishing conditions. The Port allows transient use of the Harbor to provide access by boats for off-loading fish to the commercial fishing industry at Fisherman’s Wharf.

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In response to the question about the time of the year when berth space may be available for recreational boat use, the following sentence is added to the EIR text on page 2, first paragraph:

“This is most likely to occur from August to December when transient fishing boats are fewer.”

The size of these boats is unknown, however, the depth and size of the Harbor would restrict very large boats. It is most likely that boats would be 30-40 feet in length. There could be as many as 29 recreational boats during the four-month period of low fishing boat use.

In response to the question about parking on the Hyde Street Pier and at the back of the building on 490 Jefferson Street, a sentence is added to the end of the second paragraph of EIR text on page 2:

“Parking stickers would be issued to fishing boat operators for use of parking at these locations.”

The first sentence of the third paragraph on page 2 of the EIR is revised to:

” in the existing Sheds A and C on the east side of Pier 45”.

In response to the question about parking in Sheds A and C, the EIR text on page 3, second to last sentence, is revised to clarify that parking would be

“for fish processors and employees of lease holders in the public event space.”

Side tie and rafting are permitted to accommodate the fishing boats that wish to be based in Fisherman’s Wharf, and boats which deliver to fish processors located in Fisherman’s Wharf. The Port supports the fishing industry and tries to accommodate rather than turn away fishing boats.

Existing facilities are insufficient because the only berths available for fishing boats at the Wharf are based on a 100-year old design of tying-up to piles and going up and down ladders as opposed to the current standard at other fishing

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harbors and marinas which use floating berths that are easier to access and secure; provide disabled access; provide expected amenities such as water, electricity, and storage to each berth; and provide larger berths to accommodate the newer and larger fishing vessels.

It is anticipated that parking for boat operators would be regulated through signs and permits so that only berth holders can use the parking, and others would be towed. This is a similar arrangement that is used at South Beach Harbor.

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b. Proposed Project (Harbor)

b. Proposed Project (Harbor)

Comment

“At this time it appears that the project will block vessels currently berthed at the Hyde Street Pier from being moved to restoration facilities for periodic drydockings. The proposed project must allow adequate room for the vessels to be moved.” (William G. Thomas, written comments)

Response

The design layout for the harbor considered and allows for access to the historic ships.

Comment

“San Francisco Maritime NHP is developing a "scene" depicting an historical waterfront pier. The report does not adequately discuss the visual impacts of the adjoining proposed project.” (William G. Thomas, written comments)

“On page A.3 the report does not take into consideration previous discussions held between the Port and San Francisco Maritime NHP regarding a common access between the properties for fire safety and visitor access/egress.” (William G. Thomas, written comments)

Response

The Harbor has been used historically for commercial fishing activities and would continue to be used primarily for this purpose with the proposed project. The addition of a floating Harbor would be visible from some viewing points on the Hyde Street Pier and historic boats on the east side of the Pier. The presence of fishing boats moored in the Harbor would not change the visual character of the Harbor and would be in keeping with the historic character of the area.

At this time there is no formal understanding that would allow fire safety ingress/egress between the Hyde Street Pier premises and the adjacent parking lot/public access area of the Hyde Street Harbor project. No specific design has been developed yet, however. Visitor access over the same area could possibly be allowed in the future.

The following sentence is added to the EIR, page 21, under Harbor Service Facilities:

- Fire safety ingress/egress from Hyde Street Pier would be permitted under an agreement of the Port with National Park Service.

Comment

“We do have one serious objection to the plan as proposed. The designers of the plan, as is all too often the case, have not bothered to consult with the fishing industry as to the best way to design the improvements so as to be compatible with overall fishing operations in the area and the EIR doesn’t even mention the problem. The design of the project places berthing much too far out into the main basin and will cause no end of trouble. The main basin is now and will be in the future the main staging area of the fishing fleet, and local transients. When numbers of boats arrive or prepare to leave all at the same time, as is often the case, they go into a holding pattern in the main basin, waiting to off-load, get ice, bait and supplies, get fuel and oil, etc. Weather conditions, marketing situations and other factors are all causative to the creation of congestion and the need for adequate staging area. The plan must be redesigned to satisfy this requirement or there will be massive boat traffic jams and the whole thing will self destruct.”
(R. Miller, written comments)

Response

On August 26, 1996, Port representatives met with Mr. Miller, representing the SF Crab Boat Owners Association, and Michael Bell of the SF Maritime Historic Park to review the maneuvering area in the harbor for fishing vessels and the historic ships. As a result of this discussion, Moffat & Nichol refined the design

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layout of the harbor, which is added to the EIR as Alternative A-1, in response to this comment. Messrs. Miller and Bell concurred with this layout.

ALTERNATIVE A-1 HYDE STREET FISHING HARBOR, DESIGN OPTION

In response to the request by the SF Crab Boat Owners Association and the SF Maritime Historic Park, the Port (working with Moffat & Nichol Engineers) has developed a design option for the layout of the proposed floating berth harbor (Figure 19-A). This design option would provide berth space for 60 boats (compared to the proposed design that provided 40 berths, plus 10 side-tie and 10 stern-tie spaces). The design option would not have dock space for side-tie or stern-tie boats. The linear design would extend the floating dock further to the north than the proposed design, and would provide an additional 100 feet of space in the Main Basin (390 ft. compared to 290 ft.) between the floating dock and Pier 45, thus accommodating for the boat congestion during peak commercial fishing boat activity in the Harbor. A floating barrier to prevent debris from floating from the Harbor to Aquatic Park would be added between the Harbor and Hyde Street Pier, immediately east of the Eureka dolphin. This would allow the NPS adequate space to maneuver the Eureka for maintenance. Impacts for this design option would not differ from those discussed in the EIR for the proposed Hyde Street Fishing Harbor.

Comment

"Page 5 -map "Presidio Hill" "Marin Peninsula?"

Page 6 -there is no map in the DEIR that sets out clearly the boundaries of the various jurisdictions, e.g. the Port Property, Rec Park jurisdiction, federal jurisdiction, let alone the boundaries of Aquatic Park, The National Historic Park. All of this is very confusing and the text refers to these areas, but you can't find them on a map. Please show all boundaries clearly.

Omits Pampanito. "J" should have a key on map, not just figure out from text.

Page 7 -"transient vessels" using harbor - for how long at a stretch?

Page 8 -This is supposed to show rafting? The title is at the top of figure, but another "title at bottom." Very poor labeling and it is hard to tell "rafting" from this picture. I looked at it a number of times before I figured out that was what I was supposed to see. Poor - come up with another picture and better description on this page.

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Page 9 - last full paragraph - are all the leases in B&D exclusively fish processing?

Page 10 - Fish alley on seawall lots - does this mean "is located on" lots, "runs adjacent to" lots?

Page 114 - what about handling practices in Fish Alley?"(Sue C. Hestor, written comments)

Response

Figure 1, page 5, is revised to delete the word 'peninsula' after Marin, and 'hill' after Presidio.

Jurisdictional boundaries are shown on Figure 9, page 36, in the Land Use Setting Section. These boundaries are also added to Figure 2, page 6. The parcels (#500, 502, and 504) under the jurisdiction of the San Francisco Recreation and Park Commission are cross-hatched. The letter 'J' is a designation for 'wharf'. This is added to Figure 2. The Pampanito is moored on the east side of Pier 45 and is referred to on page 9, third sentence, second paragraph.

'Transient' means that these vessels are in the Harbor for brief periods of time (days rather than weeks or months) and do not have a lease with the Port.

Clarification is added to the text on page 7, paragraph 3, of the EIR.

The photos on page 8, Figure 3, have been replaced with photos that more clearly show boats tied to each other and rafted in the Harbor.

The current leases in Sheds B and D on Pier 45 are not all fish processing. Some are related uses. Fish processors (H&N is an example) have laboratory-type interiors required for food preparation. Most tenants in Sheds B and D are Fish Receivers and Wholesalers. Receiver's are licensed to receive fish off of boats and Wholesalers get fish primarily from trucks. The fish is repackaged for distribution to restaurants and markets. Roughly 2,000 square feet in Shed D is

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leased to Polar Ice for supplying the fishing industry with ice; roughly 14,000 square feet in Shed D is for fishing gear storage; and roughly 6,300 square feet at the front of Shed B has been reserved for a business opportunity that could be solicited through a Request for Proposals.

Fish Alley is located on lots bordered on the north by a seawall, commonly referred to as a 'seawall lot'. Fish handling activities along Fish Alley are discussed on page 37 of the EIR. No changes are proposed by the Port for Fish Alley, therefore this activity is discussed under existing uses adjacent to the proposed project site to orient the EIR reader to other activities in the area.

Comment

"Page 15 - Figure 10 labels Inner Lagoon and Outer Lagoon. Inconsistent labeling. Figure 9 calls Inner Lagoon, "Pier 49." On this map the boundaries of Maritime Museum, leasehold to swim/row clubs should be added.

Page 18 - Has the port thought through and planned for all disability access requirements and area they already incorporated into the planning?

Page 19 - I had a hard time understanding this drawing.

Page 20 - I can see the improvements 1, 2, and 4, as well as on Figure 6. Can't find the others.

Page 22 - last paragraph - parking for whom? Is this allowed under BCDC on fill? (Sue C. Hestor, written comments)

Response

Figure 5, page 15 is revised to add Inner Lagoon, Outer Lagoon and Outer Harbor (Main Basin), consistent with Figure 2, page 6 Figure 10, page 41. The reference to Pier 49 is deleted from Figure 10. Boundaries of Maritime Park and the Port jurisdiction have been added to Figure 2, page 6, and Figure 9, page 36.

Access for disabled persons is part of the design for the proposed project restrooms, building space in Sheds A and C, and along aprons and Piers (without curbs). Proposed improvements would meet Americans with Disabilities Act (ADA) requirements.

Figure 7, page 19 shows a plan elevation and section of the floating berth design to illustrate that the dock fender (skirt) would be almost two feet below the surface of the water to help capture floatables and surface contamination from leaving the Harbor.

Reference to the location of the security gate and oil waste disposal facility are added to Figure 6, page 16.

Text is added to page 22 clarifying that parking in Sheds A and C would be for tenants in all sheds on Pier 45, including fish processors in Sheds B and D. This is consistent with BCDC policies for maritime uses and public access. Parking at the berth entrance and at parking lot near Jefferson would be reserved for harbor users. BCDC allows parking within the shoreline band when there are no suitable upland locations. Parking on Pier 45 would be for uses on or in immediate vicinity of Pier 45.

Comment

“A "work dock" mentioned in the project description (DEIR page 20) is not described in sufficient detail to allow for evaluation of its environmental impacts (as required by CEQA guidelines, §15124) particularly its potential impact on swimmer safety.” (Laura Taylor, written comments)

Response

The following text is added to the last bullet on page 20 to describe the combined work dock/public access area on the Hyde Street Pier dock area:

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2. Project Description

b. Proposed Project (Harbor)

The work dock area would include space for public access, a hoist and net roller. The 30' x 90' area would be used to transfer supplies from boats, layout and repair fish nets and fishing gear.

The harbormaster would be responsible for dock supervision. There are no safety issues related to the work dock activities that would affect swimmers in Aquatic Park. There are no current plans to share the work dock area with NPS operations.

Comment

"On page A.23 the report discusses the relocation of park structures on Hyde Street Pier. Since changes have recently been authorized please review this section to assure that the moves mentioned are still necessary." (William G. Thomas, written comments)

Response

Page A. 23 is part of the Initial Study completed for the project in 1994 and the DEIR updates information from the Initial Study. The Port is not proposing to move, relocate or in any way change the existing wood structures on the San Francisco Maritime National Park lease space on Hyde Street Pier. The proposed project no longer includes construction of the Harbor Master building that would effect the use of Hyde Street Pier. See Figure 6, page 16 of the EIR for a layout of the proposed project.

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c. Proposed Project (Pier 45)

c. Proposed Project (Pier 45)

Comment

“Will new leases on Pier 45 increase the square footage available for seafood handling and processing? Will any operating limits be placed on the quantity of seafood permitted to be landed, handled and processed? In short, the project description leaves one entirely guessing about the increased volume of seafood landing and handling that this project will permit. (Margaret Reilly and Roger Beers, written comments)

“I also understand that the project sponsor will submit an additional alternative for Sheds A and C on Pier 45, which will provide for fish processing and fish handling, as well as gear storage. I support that.” (Chris Martin, verbal comments)

Response

The proposed project in the DEIR did not assume any increase in the square footage of space in Sheds A or C on Pier 45 for fish processing. Since the time of publication of the DEIR, however, the Port has modified the proposed uses of Sheds A & C (in response to recommendations of the Pier 45 Advisory Group) to include 32,000 square feet of space for fish processing/handling. There would be no operating limits placed on the quantity of seafood permitted to be handled or landed. This alternative is described in Section D, STAFF INITIATED TEXT CHANGES AND ERRATA of the Comments and Responses, Page C&R 232. No significant environmental impacts have been identified for this change to the proposed project, and information about potential water quality, odor, traffic, and parking impacts from fish processing is addressed in the EIR. This change does not represent a substantial change to information in the EIR that would require recirculation for public review and comment.(CEQA Section 21092.1)

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c. Proposed Project (Pier 45)

Comment

"The National Maritime Museum Association (NMMA) is a non-profit organization dedicated to maritime preservation and education. Since 1982, the Association has independently operated the WWII submarine USS Pampanito, (SS-383) a National Historic Landmark, at Pier 45, Shed A. The Pampanito is one of the most popular historic vessels in the country with over 250,000 visitors annually and has become a tourist destination at Fisherman's Wharf.

We would like to go on record to state that the draft EIR does not reflect our current operations at Pier 45-A nor our long-term plan to reinstate our support facility inside the shed and re-open our gift Shop. The Pampanito is mentioned in the history of Pier 45 but is nowhere mentioned in the proposed alternatives.

Prior to the Loma Prieta earthquake, support facilities for the submarine (administration, storage of emergency and restoration equipment etc.) were located inside Shed A. Additionally a small gift shop was located on the pier apron. After the earthquake and the closure of the pier sheds our support facility was temporarily located outside the pier and administrative activities as well as the gift shop were moved into a temporarily trailer." (Kathy Lohan, written comments)

Response

The Port is currently negotiating a lease with the NMMA to occupy 10,000 square feet of space in Shed A, and retain the space along the east side of the pier for the Pampanito.

The following text, describing this use, is added to the Project Description, EIR page 23.

Pampanito—about 10,000 square feet of Shed A, along the east side, would be used by the National Maritime Museum Association (NMMA) under a lease agreement with the Port for a visitor gift shop and administrative support facility for the Pampanito submarine. The Pampanito would continue to be moored along the east side of Pier 45 adjacent to Shed A where visitor access is provided along the apron.

Text is also added to EIR Section A, Land Use, Zoning and Plans, page 38, second paragraph, as follows.

Other vessels (Pampanito historic submarine)

Comment

“When you examine the footnotes, you see that the real thrust of this building is for the retail space and parking, educational center and special events center to be used by hotels.” (Jeanine Dubois, verbal comments)

Response

The commenter is unclear about what footnotes indicate a ‘thrust’ to retail space, parking, educational center and special events. The purpose of the proposed Fisheries Center would be to educate the public and allow observation of a working commercial fishing harbor and pier (EIR, page S-5). The EIR includes impact analysis for four alternative use scenarios for Sheds A & C. The final preferred scenario would be selected by the Port Commission, in consultation with the Pier 45 Advisory Group. As long as the selected scenario includes uses addressed in this EIR, and no significant impacts are identified for the uses, this EIR (after certification) can be used by decision makers to make a determination whether to approve, disapprove or modify the proposed project.

Comment

“Pier 45 fish handling, fine. The fish that come into Pier 45, the bulk of those fish that Pier 45 will rely upon are brought in by ground transportation. That is a fact the Port, if they are honest, will not and do not dispute that fact.” (Ken Coren, verbal comments)

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Response

The Port does not have access to information documenting the volume of fish brought in by truck to Fishermans Wharf. Trucks use Jefferson Street (see page 13 of the EIR, photos of truck trading activity) to off-load and trade with other trucks, or sell to trucks from restaurants. Not all the fish brought in by truck is taken to Pier 45 sheds. Some goes to processing and handling businesses along Fish Alley and to other fish processing and brokering businesses located away from Fishermans Wharf.

Comment

“Pages 21 through 23 discusses the Fisheries Center on Pier 45. The description of the Fisheries Center in the EIR comes out of a controversial 1994 Sedway Report that is inconsistent with the description of the Fisheries Center previously described in 1989 by the California Coastal Conservancy at the request of the State Legislature. I would ask that the EIR file the same description that the state legislator presented, rather than the Sedway Report.

Page 3 refers to the Sedway feasibility study completed for the Port in 1994 using grant funding from National Oceanic and Atmospheric Administration (NOAA), which among other things concluded industry-serving uses would not be "financially self-supporting and that complementary uses would be necessary to generate revenue to support the overall development of the Pier.

The implementation and handling of this study were seriously flawed. Its findings were compromised and not accurate. A charge has been made by one of the team consultants that fish industry uses were not seriously considered since there was an apparent bias or pressures in favor of placing non-fish industry uses in Sheds A and C on Pier 45. In fact, commercial fishing uses in adjacent Sheds B and D are paying their way, providing the Port with approximately \$600,000.00 of annual income or approximately 45¢ a square foot monthly. By comparison, Pier

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c. Proposed Project (Pier 45)

39, an extremely successful commercial project pays the Port approximately 30¢ a square foot monthly. Please delete the reference that the commercial fishing industry is not -self-supporting.

Also please insert on Page 3 that the Port has convened a group of community representatives, including representatives from the commercial fishing industry, which will advise the Port on the long term uses of Shed A and C.

Page 21 through 23 discusses the Fisheries Center on Pier 45. The description of the Fisheries Center in the EIR comes out of the controversial 1994 Sedway Report and it is inconsistent with the description of the Fisheries Center previously described in 1989 by the California Coastal Conservancy at the request of the State Legislature in the document titled AB 45 Preliminary Feasibility Commercial Fishing and Marine Environmental Research and Training Center, Pier 45 and Satellite Locations (here "AB 45 Report"). I suggest the EIR follow the description of that State report rather than the Sedway document, since it has been the model used in planning and public presentations since 1989.

The Sedway interpretation with its "visitors center" and "40,000 square feet of retail space" (and golf-simulators) sounds more like a shopping center than that the Fisheries Center. In the AB 45 Report, the Fisheries Center is described as an institution conducting research, maintaining a reference library and computer center for the use of the fishing industry, training and development activities devoted to productive methods of harvesting, processing, and marketing seafood products, jointly sponsored by private industry and public institutions. This institute will also study toxic materials disposal, ocean and Bay dumping of wastes, marine energy conservation, resolution of fisheries, oil industry and ocean mining conflicts. This facility will have areas devoted to public exhibitions, conference areas, interactive displays and possibly a Bay model for both research and public education purposes. Please incorporate the site specific descriptions from the AB 45 document into the EIR model alternatives." (Christopher Martin, written comments)

Summary of Comments and Responses

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c. Proposed Project (Pier 45)

Response

The Sedway report was the most recent study for potential uses of Sheds A & C at the time the EIR was initiated. Though the study was not complete when the project description was drafted, the alternative uses of the sheds represented a broad spectrum of feasible uses that the EIR could analyze. The Port wished to keep its options open regarding exactly how the sheds would be developed, and funding has not been identified to pursue any specific development scenario. The EIR includes several alternative uses of the sheds because it is known that the Port plans to pursue development of the sheds, as funding is available. The EIR considers this range of potential uses to capture the potential cumulative impacts in the Fishermans Wharf area (particularly for traffic and parking). The Coastal Conservancy Report completed in 1988 provided some general possible fisheries center type uses, but recommended further, detailed feasibility analysis of a center at Pier 45. The Sedway report provided that more detailed analysis.

As suggested by the commenter, the text on page 3 of the EIR is revised to add to the last paragraph:

The Port has convened a group of community representatives, including representatives from the commercial fishing industry, to advise the Port on the long term uses of Sheds A & C. The group is referred to as the Pier 45 Advisory Group.

The Port recognizes that the Pier 45 Advisory Group does not consider the Sedway Report representative of what is needed at Pier 45 because it did not include fish processing and gear storage and parking for the fishing industry. The June 5th letter from the Port (Sharon Polledri to City Planning) would modify the preferred Pier 45 project description to include fish processing space and gear storage.

The Project Description for Pier 45 has been changed to include an additional alternative for Sheds A & C in response to the June 5th letter from the Port to City Planning.(see Staff Initiated Text Changes, Section D of the C&R, page 232).

The 1988 Coastal Conservancy report made preliminary findings on possible uses and activities for a Fisheries Center on Pier 45. One of its conclusions was that “the likelihood of successful funding for a new applied research and public education center on Pier 45 is uncertain.” The Sedway feasibility study could not find one such facility that was not reliant in part on grants, contributions and revenues from retail sales. As an example, grants and contributions account for 50% of the Exploratorium’s annual budget. Looking at retail was one method of reducing reliance on uncertain sources of grant funding and contributions. The Port is committed to working with the Pier 45 Advisory Group to resolve differences in opinion about the feasibility of various uses in the sheds before finalizing the development design for the Sheds A and C. If the final design proposal is substantially different from what is analyzed in this EIR, a Supplemental or Subsequent EIR would be required before a determination can be made regarding project approval.

Comment

“I would like to note the United States Coast Guard’s interest in maintaining access to moorings and Port services on the east side of Pier 45. Coast Guard cutters up to 378 feet in length have moored here for years while visiting the City of San Francisco and participating in public events, a practice I would like to continue during and after the work planned at this site. We expect our current level of use to continue, at about 48 days per year. The ability to reprovision and maintain 24 hour access to and from the ship - without risk of injury to the public and our personnel - are important considerations.

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As I am sure you appreciate, San Francisco is among the best liberty ports on the West Coast, and Pier 45 provides walking distance access to many of the City's most popular attractions.

Finally, I would like to note that the Coast Guards presence at Pier 45 complements your plans for an educational fisheries center in Shed C. Fisheries law enforcement is one of the primary missions of the cutters that moor here. The prospect of increased public exposure afforded by the a side promenade is one we view favorably." (S. D. Bibeau, written comments)

Response

The Port is making repairs to the fendering on the east side of Pier 45 with the intent of continuing to accommodate visiting ships, including the Coast Guard cutter. If fish processing is introduced to Shed C, fish would be transported to the shed by truck, not by boat, because the east side does not have a breakwater to protect commercial fishing boats from wave action. The wave action of the larger passenger ferry vessels and excursion boats in this area create wave actions that are difficult for smaller fishing vessels to tie up. According to the Port (tenant interviews) 50% of the product arrives by truck to Pier 45 Sheds B & D. It is anticipated that the fishing industry tenants in Shed C would receive and distribute products by truck. According to the Port's proposed Waterfront Plan, public access along the apron is envisioned, along with ceremonial berthing. Improvements to the apron are now underway to provide ceremonial berthing. (Port Capital Plan)

Comment

"Although the DEIR states that the Port's objective with regard to Pier 45 Shed A & C is "to develop uses complementary to the fishing industry", (DEIR, pages S-5 and 1), it proceeds to describe the Project as a series of tourist/visitor serving functions cloaked as a "Fisheries Center" consisting of a theater, cafe, food services area and gift shop, a Conference Center with a catering kitchen which will be "cross marketed with the area's hotels" (DEIR, page 22) and 40,000 square

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feet of retail space. How are these various stated uses complementary to the fishing industry? Other than its name "Fisheries Center" what does it have to do with the commercial fishing industry? At a public presentation (on May 21, 1996) Port personnel Sharon Lee Polledri, Dan Hodapp and others) stated in response to such questions that the Port intends to change the proposed project to include fish processing. In addition, Port Planner, Sharon Polledri is quoted as saying that the Port will find a way to incorporate fish processing as a use at Pier 45 Sheds A & C (*S.F. Examiner*, May 20, 1996)." (Laura Taylor, written comments)

Response

The June 5th letter from Sharon Polledri to City Planning modifies the Port's preferred project description to include fish processing, reduce the amount of retail space to 15,000 square feet, include maritime related offices such as fish brokers, storage space for fishing gear, parking for the fishing industry, and fisheries center.

The Port is also considering the feasibility of creating a Fisheries Center at Pier 45 in Shed A—shown as Event Space. The Port will work cooperatively with the Pier 45 Advisory Group to finalize the proposed uses in the Event Space. As envisioned, the Center would educate the public about the fishing industry; provide central source for fisheries data and exchange of information; train people regarding seafood handling, processing and preparation; and promote the consumption of seafood products.

The definition of what would constitute a fisheries center is yet to be decided but could include a demonstration kitchen for the handling and preparation of seafood products; a visitor center to educate the public on the history of Fisherman's Wharf and the workings of the fishing industry; a resource center with literature and computer hook-ups to access the latest information that affects the fishing industry; and theater (maybe 100 seats) geared towards an aspect of the fishing industry; and other possible uses.

d. Approvals

Comment

"The DEIR should discuss the need for a water quality certification or other review by the Regional Water Quality Control Board (RWQCB), the historical uses of the site, whether deposition of toxic materials at the site is likely, whether sampling of the Bay muds here is warranted prior to commencing any pile removal or dredging, and what, if any, review by the RWQCB is required as part of the approval process. Finally, the DEIR should address the type of piles, if any, which would be used in constructing the project. The California Department of Fish and Game, the RWQCB, and the Commission have new standards regarding the use of creosote treated wood pilings in the Bay which may affect this project. (Joseph LaClair, written comments)

Response

Approvals required for the proposed project related to water quality and dredging are described in the EIR on page 31 (II Project Description, D. Project Approvals) and on page 166 (V. Mitigation Measures) under Measures Required By Law.

Both the Army Corps of Engineers and the Regional Water Quality Control Board would need to certify that water quality objectives are met as part of the permit approval process for dredging. Piles used for construction of the Hyde Street Harbor dock and the walkway to the floating dock would be 24' square concrete piles and not creosote treated wood piles. Proposed piles are described in the top paragraph of page 18 of the EIR.

Comment

"The Bay Plan policies controlling fill in the Bay also requires that at least 50 percent of any pile-supported replacement fill on which commercial recreation is to be located must be provided for public access and open space purposes. The Commission's fill policies for marinas state that fill

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should be permitted only for marina facilities that must be in or over the Bay. Fill for marina support facilities, including parking, and harbormaster facilities may be permitted at sites with difficult land configurations provided the fill is the minimum necessary and any unavoidable loss of Bay habitat is offset to the maximum amount feasible, preferably near the site.” (Joseph LaClair, written comments)

Response

Public access at the harbor would consist of a 30' x 90' (2700 sq.ft.) section at the north end of the pier that is shared as a work dock for harbor users and a 160' x 6' walkway (960 sq.ft.) leading to this space. Public access on Pier 45 consists of the east apron and northern tip, where compatible with fishing industry uses, for a total of approximately 35,000 sq. ft.

The coverage and fill of the Bay and Shoreline Band is shown in Table 3, page 17 of the EIR. Proposed parking at the Hyde Street Pier (shown in Figure 6, page 16 of the EIR) is on reconfigured rock fill and would be dedicated parking for commercial fishing boat operators and fishermen. This location is proposed to provide access to boats for off-loading gear and supplies. An off-site parking location would not meet this need.

Comment

“The Port of San Francisco holds several permits for projects at Pier 45. Amended BCDC Permit No. M76-69 authorizes the construction of a chapel, the placement of a Fisherman’s Memorial with public access on Wharf J-3 (BCDC Permit No. M88-63) authorizes the placement of temporary Wharfingers office (trailer) on wharf J-3, until such time as a permanent office is constructed on the Pier. BCDC Permit No. M89-94 authorizes extensive earthquake repairs to Pier 45, including the areas beneath Sheds A, B and C. Finally, BCDC permit No. 1075 authorizes the San Francisco Maritime Museum to berth the SS Pampanito, an historic submarine beside the western side of the Pier, and requires the provision of public access. The DEIR should

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discuss whether the projects authorized in these and any other existing permits would be affected, especially if any required public access would be reduced or eliminated as a result of this project.

The NOP on page 4 states that BCDC regulations defined the floating berths as fill in the Bay. Several other elements of the project would be within the Commission's jurisdiction and would also likely require an application for a major permit to be considered before the Commission at a public hearing and voted on at a subsequent Commission meeting.

Both the proposed deck extension for the harbormaster facilities, and the pile-supported and floating structures for the proposed commercial fleet marina expansion would constitute fill in the Bay. Certain repairs to existing pile-supported structures could also be considered fill in the Bay, depending on the nature and extent of the repairs. Section 66605 of the McAteer-Petris Act, in part, provides that:

“further filling of San Francisco Bay should be authorized only when public benefits from fill clearly exceed public detriment from the loss of the water areas and should be limited to water-oriented uses (such as...water-oriented recreation...) or minor fill for improving shoreline appearance or public access to the bay....That fill in the bay for any purpose, should be authorized only when no alternative upland location is available for such purposes...That the water area...to be filled should be the minimum necessary to achieve the purpose of the fill...That the nature, location and extent of any fill should be such that it will minimize harmful effects to the bay area, such as the reduction or impairment of the volume surface area or circulation of water, water quality, fertility of marshes or fish or wildlife resources...That public health, safety and welfare require that fill the construction in accordance with sound safety standards...[to protect]...persons and property against the hazards of unstable geologic or soil conditions or of flood or storm waters...That fill...would, to the maximum extent feasible, establish a permanent shoreline...” . “

The DEIR should discuss these provisions of the McAteer Petris Act and the Bay Plan in detail and provide evidence to support statements made about the effects of fill on the Bay. The DEIR should also discuss the Commission's recreation policies, which state, in part that:

“marinas should be allowed on any suitable site on the Bay. Unsuitable sites are those that tend to fill up rapidly with sediment, have insufficient uplands, contain valuable marsh, mudflat or other wildlife habitat, or are subject to unusual amounts of fog.

The Commission can only approve the project if it provides maximum feasible public access. The Bay Plan policies on public access state, in part:

“In addition to the public access to the Bay provided by waterfront parks, beaches, marinas, and fishing piers, maximum feasible access to and along the waterfront and on any permitted fills should be provided in and through every new development in the Bay or on the shoreline....Whenever public access to the Bay is provided as a condition of development, on fill or on the shoreline, the access should be permanently guaranteed....Public access improvements provided as a condition of any approval should be consistent with the project and the physical environment, including protection of natural resources, and provide for the public's safety and convenience. The improvements should be designed and built to encourage diverse Bay-related activities and movement to and along the shoreline, should permit barrier-free access for the physically handicapped to the maximum feasible extent, should include an ongoing maintenance program, and should be identified with appropriate signs....In some areas, a small amount of fill may be allowed if the fill is necessary—and is the minimum absolutely required—to develop the project in accordance with the Commission's public access requirements....Access to the waterfront should be provided by walkways, trails, or other appropriate means and connect to the nearest public thoroughfare where convenient parking or public transportation may be available....”

The DEIR should describe any proposed public access and whether it would be consistent with the Commission's public access policies.

"The *San Francisco Waterfront Special Area Plan* policies on public access state, in part, that:

"in accordance with general Bay Plan policies, maximum feasible public access should be provided in conjunction with any development of existing or replacement piers. Public access should be located at ground or platform level, but minor variations in elevation intended to enhance design or open space may be permitted. Public access should also be open to the sky, although some covering may be allowed if it serves the public areas and does not support structures. Particular attention should be given to the provision of perimeter public access along the platform edge. Other uses may extend to the platform edge subject to the following conditions:

- (a) Such use should enhance the total design of the project, should serve to make the public access more interesting, and should not divert the public way along more than twenty percent (20%) of the total platform edge.
- (b) Deviations of the public way from the platform edge should be limited to short distances."

"The DEIR should discuss whether the project is consistent with the public access policies in the *San Francisco Waterfront Special Area Plan*." (Joseph LaClair, written comments)

Response

None of the existing Bay Conservation and Development Commission (BCDC) permits would be affected by the proposed project. This EIR (once Certified) would be used as support for the permit submitted to the BCDC for approval of the proposed Hyde Street Fishing Harbor and Pier 45 Sheds A & C projects. The proposed project is consistent with the BCDC public access policies and provides barrier-free access for handicapped along pier aprons. Public access to views of

the Harbor from Hyde Street Pier and Fish Alley would be improved with the proposed project by paving over the rockfill to provide public access and work space for fishermen.

The EIR includes the required information (Table 3, page 17) on the amount of Bay fill and Shoreline cover, including the coverage for the floating docks and piles.

The following clarification is added to the EIR, page 110, Land Use, Zoning and Plans, Impacts:

The proposed project is consistent with BCDC policies and the McAteer-Petris Act. Public access would be provided at the Hyde Street Harbor (2,700 sq. ft.), at the work dock (960 sq. ft.), and along the aprons of Pier 45 (35,000 sq. ft.). Proposed new fill in the Bay and Shoreline Band would be water-dependent and would not affect Bay water quality or marine biology as discussed in this report under Maritime Biology Impacts. The proposed Harbor improvements would meet stated objectives of BCDC and the Port for waterfront improvements to support and maintain the commercial fishing industry in San Francisco.

Comment

“The Commission’s jurisdiction at this location includes Bay waters up to the shoreline, and the line 100 feet upland and parallel to the shoreline which defines the Commission’s 100-foot “shoreline band” jurisdiction. Although it is not stated in the NOP, the elements of the project which appear to be located in the Commission’s jurisdiction include: (1) the demolition and reconstruction of the pier, including fill for the harbormaster facilities; (2) the placement of floating fill or boat slips; (3) the change of use in portions of Sheds A and C; and (4) public access. The DEIR should identify those project elements within the Commission’s jurisdiction and which will require BCDC authorization.” (Joseph LaClair, written comments)

Response

The Harbormaster’s two-story building proposed at the foot of Hyde Street Pier in the NOP and Initial Study is no longer part of the proposed project. The Port has

improved an existing two-story building along Fish Alley overlooking the Outer Lagoon as the Harbormaster's Office.

BCDC approvals are described in the EIR on pages 28-30, under Regional and State Approvals, and on page 110, under Impacts. The EIR does not identify any conflicts with BCDC policies or with the guidelines of the McAteer-Petris Act.

Comment

"The DEIR does a good job summarizing (1) the need for a BCDC permit for the proposed project, and (2) the Commission's laws and policies which apply to the proposed project. Because the proposed project includes approximately 0.5 acres of "fill" the project would likely be processed as a major permit application (Regulation Sections 10300,10400,and 10500)." (Nicholas Salcedo, written comments)

Response

The Port would complete the BCDC permit application after certification of this EIR and at the time that they were ready to move forward with a proposed project.

Comment

"In addition, the Federal and State Endangered Species Acts will need to be addressed and additional project approvals pursuant to these acts obtained. These approvals, such as a Section 7 Consultation (Federal Endangered Species Act) with the U.S. Fish and Wildlife Service, need to be addressed under the Project Approval Section of the DEIR (pages 26-32)." (David Behar, written comments)

"In addition the Federal and State Endangered Species Acts will need to be addressed and additional project approvals pursuant to these acts obtained. These approvals, such as a Section 7 Consultation (Federal Endangered Species Act) with the U.S. Fish and Wildlife Service, need to be addressed under the Project Approval Section of the DEIR. The Environmental Setting

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portion of the DEIR is misleading in this regard and, the DEIR's conclusion that there are "No significant environmental effects that cannot be avoided if the proposed project is implemented" (DEIR page 173) is not correct." (Linda M Sheehan, written comments)

"The Project approvals section of the DEIR must include reference to the regulatory requirements of the state and federal endangered species acts (ESA) which required consultations with the U.S. Fish and Wildlife Services and the California Department of Fish and Game." (Laura Taylor, written comments)

Response

Information about the Federal Endangered Species Act and California Endangered Species Act is added to page 32 of the EIR as follows:

Federal Endangered Species Act of 1973 (16 USC 1531-1543)

This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Section 7 of the act requires Federal agencies, in consultation with and with the assistance of the Secretary of Interior, to insure that actions they authorize, fund or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. Regulations governing interagency cooperation under Section 7 are found in the Code of Federal Regulations Part 402.

Information about the California Endangered Species Act is added to Page 31 of the EIR following paragraph three.

California Endangered Species Act (Fish and Game Code 2050 et seq)

The California Endangered Species Act (CESA) establishes that it is the policy of the State to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that State agencies should not approve projects which would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. CESA requires State lead agencies to consult with the Department of Fish and Game (DFG) during the CEQA process to avoid jeopardy to threatened or endangered species. As an outcome of consultation, DFG is required to issue a written finding as to whether a project would jeopardize threatened or endangered species and to specify

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reasonable and prudent alternatives which would avoid jeopardy. CESA provides for joint consultations when species are listed by both the State and Federal agencies.

3. ENVIRONMENTAL SETTING

a. Land Use

Comment

- "Page 33 Para 2 - National Park Service jurisdiction not included on any map.
- Page 35 - explain on map, area under control of Dolphin and Rowing Clubs
- Page 37 - Bell building should be on map of existing clearly marked.
- Page 41 - two blocks between Mason & Taylor have strange (squiggly) use boundaries."
(Sue C. Hestor, written comments)

Response

Figure 9, page 36 of the EIR is revised to show the jurisdictional boundaries of both the Port of San Francisco and the SF Maritime National Historic Park (National Park Service). An inset to Figure 9 shows the property boundary of parcels 502 and 504 under the jurisdiction of the SF Recreation and Park Commission, and leased to the South End Rowing Club and the Dolphin Club.

Reference to the Figure is added to the text on page 35, as follows.

"The private Dolphin and South End Swimming and Rowing Clubs, adjacent to Aquatic Park and Hyde Street Pier (these Clubhouses located on parcels 500, 502 and 504, under the jurisdiction of the San Francisco Recreation and Park Commission, on land zoned P-Public Use, and leased to the Clubs). See Figure 9."

The Bell Smoked Fish Building, to be demolished for parking for fishing boat operators in the Harbor, is shown on Figure 5, page 15. Reference to this figure has been added to the text, at the end of the first paragraph on page 37.

Comment

"I'm here today representing a group of canoeists. We have a 45-foot 6-person canoe that lives on the beach just to the east of the Hyde Street Pier. I want to point out to you a glaring omission in the EIR, which is that the beach doesn't exist to the analysts who did the EIR because it is not mentioned, as far as I could tell, anywhere in it.

From my reading of the EIR, it appears that this beach can be maintained and be fully compatible with the project, and I would urge you to see to it that the EIR does examine the future of this beach and our use of it." (Susan Alexander, verbal comments)

Response

The proposed reconfiguration of the rock fill and the proposed construction of the Hyde Street Harbor facilities (work dock, parking for fishing boat operators and secured access to the berthing facility for boats) would eliminate the beach referred to by the commentor.

The Port does not anticipate any beach area remaining for recreational canoeists between the harbor and the Hyde Street Pier. Existing recreational use of the beach is occurring without knowledge or approval from the Port Commission.

Comment

"The document neglects, however, to mention that the Hyde Street Pier is identified in the Bay Plan (Map No. 10) as a waterfront park priority land use area (see Joe LaClair's letter, page 2, P2). The EIR should mention on page 29 that portions of the proposed project are within a park priority use area as designated by the *San Francisco Bay Plan*. Park priority use areas are reserved for water-oriented recreation uses in accordance with the Bay Plan Policies on pages 21 and 22 (attached)." (Nicholas Salcedo, written comments)

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3. Environmental Setting
a. Land Use

Response

The EIR identifies the project site as part of the San Francisco Waterfront Special Area Plan (Map 1), on page 28 under the jurisdiction of the Bay Conservation and Development Commission (BCDC). Map 1 shows the western side of the Hyde Street Pier as part of the Maritime State Historic Park and the eastern side of the pier as Fish Processing, Limited Commercial Recreation and Public Access. The portion of Hyde Street Pier proposed for reconstruction for the project is currently used for parking, fish processing and fueling (a fuel truck was previously parked at the foot of the Pier, on fill). The proposed project would improve public access and visual character of the area visible from the Maritime Historic Park.

Comment

“The Project together with other existing and proposed land uses in the area are also the subject of a current Draft Waterfront Land Use Plan (Waterfront Plan) mandated by Proposition H which has passed by the voters of San Francisco in 1990 to restrict uses at the waterfront to water oriented, maritime uses. This Waterfront Plan which is to establish appropriate uses for the waterfront including the Project area, is currently the subject of a Master Environmental Impact Report (EIR). It makes no sense and is contrary to the intent of Proposition H and CEQA for this Project to move ahead of the Waterfront Plan and its associated Master EIR particularly in light of the fact that this Project falls within the waterfront planning area and involves adding activities on the Port piers which do not constitute maritime uses.(See also the discussion of Cumulative Impacts in Part IV.C. below).” (Laura Taylor, written comments)

Response

Versions of The Hyde Street Fishing Harbor/ Pier 45 Sheds A & C project have been discussed since 1988. As with other recent proposed projects under the Port jurisdiction, it is not dependent on consideration or approval of the Waterfront Land Use Plan. Though the proposed project is within the terms of Proposition H,

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3. Environmental Setting

a. Land Use

and allowable under the WLUP, it could be approved with or without the Waterfront Land Use Plan in place.

The Draft EIR for the Waterfront Land Use Plan was published on May 24, 1996 and is scheduled for Certification by the Planning Commission on 12/19/96. Its relationship to the proposed project is discussed on page 40 of the EIR.

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b. Water Quality-Physical Conditions

b. Water Quality

Physical Conditions (Transport of Pollutants)

Comment

“Additional studies must be conducted of the transport of pollutants in the area.

It is important to understand the particular conditions which create this transport of pollutants into Aquatic Park and the relationship of those conditions to the times that people typically want to swim in Aquatic Park. These conditions may be defined as an ebb current, with a wind direction from the northeast, east or southeast, or a strong ebb current without an opposing wind. The wind is a factor because when it is from the northwest, it tends to bottle up the surface waters in the inner lagoon, and pollution from that source is not as noticeable even under ebb current conditions.

Unfortunately, the conditions just described which lead to transport of pollutants from the inner and outer lagoons into Aquatic Park coincide regularly with times which are considered most desirable by the majority of the Dolphin Club members for swimming in Aquatic Park. Thus for example, during the summer months, there is usually a northwesterly wind that commences in the mid to late morning and continues until approximately 7 p.m. The “U.S. Coast Pilot #7 (1988), published by the National Ocean Service, Charting and Geodetic Service, and National Oceanic and Atmospheric Administration, explicitly outlines, on pages 150 and 151, this wind tendency in San Francisco Bay. As previously noted, this tends to bottle up pollutants that would otherwise be transported to Aquatic Park during ebb current conditions. Thus the times of least pollution during the work week are also the times when the majority of Dolphin Club members are at work and unavailable for swimming. When those people desire to swim -- in the morning before the work day starts, or in the evening after work, which remains light for several hours -- the northeasterly wind has subsided and the ebb current is likely to transport pollutants from the inner and outer lagoon into Aquatic Park.

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At other times of the year, the transport of pollutants into Aquatic Park follows a less predictable pattern, but since there are two low tides every day of the year, there are significant periods of time during the remainder of the year during daylight hours, when people swim, that the conditions for pollution of Aquatic Park exist.

The Port has ignored the request to study the transport of pollutants in the area, with the result that the DEIR lacks any basis for predicting the project's impacts on Aquatic Park." (Margaret Reilly and Roger Beers, written comments)

"It must also be noted that the DEIR incorrectly states that the historic ship Eureka sits on the bottom in bay sediment and somehow impedes water circulation between the harbor and Aquatic Park (DEIR, page 48). According to Michael Bell of the National Park Service (conversation June 6, 1996) none of the historic ships rest on the bottom." (Laura Taylor, written comments)

Response

The EIR (pages 44 to 46) describes the physical conditions (tides, currents, waves, water depth, circulation and flushing) in the project area, including the harbor and Aquatic Park. The source of this information was: "Fisherman's Wharf Harbor Feasibility Study", dated June 1, 1988 by Moffatt & Nichol Engineers, and AGS and Kwan Architecture; "Numerical Simulation of the Circulation and Water Quality Within Fisherman's Wharf Harbor" dated August 1989, by the U.S. Army Corps of Engineers (Special Projects Report, No 84-10) and the "Fisherman's Wharf Breakwater Monitoring Study" by Jonathan Lott, dated May 1994, U.S. Army Corps of Engineers. This existing information for the project area was determined adequate for the EIR, and no current surveys or hydrodynamic studies were completed by the EIR consultants.

The correspondence from the Dolphin Club and South End Rowing Club representatives to the Department of City Planning dating back to December of 1989 was reviewed by the EIR water quality technical team. The specific

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b. Water Quality-Physical Conditions

concerns about the potential transport of pollutants from the Harbor to Aquatic Park during ebb and flood tides were considered by the EIR consultants for the statistical evaluation of coliform data and for designing the EIR water quality sampling plan. The statistical analysis reported "No important inter-station correlations were detected for ebb or flood periods and individual stations were not significantly correlated with the size of tidal fluctuations near the time of the sampling event." The data evaluated included over 200 sampling events from September 1991 to October 1992 that included sampling at Aquatic Park, an area east of Hyde St. Pier and an area west of Fishermans Wharf. The statistical evaluation did not detect significant correlations between Aquatic Park and the harbor, but did detect a significant correlation between Aquatic Park and the two control stations to the west. (see Water Quality Report, Appendix G, SOMA Corporation, 1995)

Appendix C of the January 1996 Water Quality Study describes the Sampling Plan conducted by Woodward-Clyde Consultants, stating that "One goal of this Sampling Plan is to assess conditions in the Project Area and determine water quality in Aquatic Park during the period in which the Park may be influenced the most by water quality conditions in the project area. In the project area, one factor which may influence water quality conditions is the amount of flushing due to tidal currents. Higher pollutant concentrations are estimated to occur following a period of minimal flushing during which pollutants may accumulate in the project area without being diluted by other waters. Periods of minimal flushing are expected to occur during the neap tides of the first few weeks of June. Therefore, to establish water quality information during these periods of minimal tidal currents in the project area, it is proposed to sample during the period of ebbing flow when current velocities are low." Actual sampling was conducted on May 10, 1995 from 0930 to 1200 during ebbing tide conditions.

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b. Water Quality-Physical Conditions

The correction is noted regarding the Eureka sitting on the bottom of the Bay.

The text on page 48 of the EIR is corrected to reflect this.

Comment

"The DEIR attempts to analyze the existing setting - inadequately, as noted above - but nowhere attempts to project what the impacts of the most salient feature of the project, the additional berths for commercial fishing vessels, will be on the water quality in Aquatic Park. Thus, the DEIR reviews the existing conditions in the Inner and Outer Lagoons and in Aquatic Park, but never seems to grasp the fundamental fact that the project involves at a minimum moving the sources of pollution in the former area to a location immediately adjacent to Aquatic Park. Thus, no attempt is made to extrapolate from any of the sampling data presented what the likely impacts on Aquatic Park will be from the Project.

As just one example, the DEIR acknowledges (1) that tributyltin and tetrabutyltin "are commonly used as an anti-fouling agent and used in marine paints for the hulls of boats," (2) that these were both found in the Inner Lagoon, where fishing boats are presently berthed or tied up, and (3) that tributyltin was there detected at a level almost three times what would be "considered protective of human health." (p.53). Despite these findings, the DEIR never considers the fact that the sources of this toxic chemical will now be moved over to a location immediately adjacent to Aquatic Park where people swim, or that the number of such sources in the area is likely to increase.

The same is true of the DEIR's treatment of all other contaminants detected in the sampling. Thus, because there is no attempt to study the transport of pollutants, the DEIR authors do little more than speculate about the sources of the bacteriological water problems. The DEIR and WQS speculate that storm water and municipal sewer discharges may contribute to bacteria found at all test sites. Perhaps so during wet periods, not so during dry months." (Margaret Reilly and Roger Beers, written comments)

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b. Water Quality-Physical Conditions

Response

Commercial fishing boats have actively used the harbor for years. Fishing boats use the Main Basin (where the proposed berthing dock would be) to access the fueling station. The transport of pollutants from the Harbor to Aquatic Park was addressed in the EIR (pages 44-50) and in the separate technical studies completed for the EIR and included as part of the Water Quality Study, dated January 1996. Previous studies on the tides, currents, circulation and other physical conditions affecting transport of pollutants were used for the Water Quality Study and EIR. No new hydrodynamic studies were deemed necessary for the EIR. The impacts of the proposed Harbor facilities are discussed under Fuel Spills and Other Activities From Boats, page 115-119 of the EIR.

In response to the comment about dry weather vs. wet weather bacteria, the 1990 Water Quality Report for the Seafood Center environmental document reported that, "Coliform levels in Aquatic Park are similar for all tidal differentials for both incoming and outgoing tides. This means that in dry weather the direction and magnitude of the tides do not affect the average movement of polluted water from the harbor into Aquatic Park...The highest bacterial levels in Aquatic Park seem to occur at the east side at incoming tides, and the lowest tidal differentials."(page 15).

Tributyltin (TBT) is currently banned for use on commercial and recreational vessels. The only currently allowed applicators are the military. The most likely source of the TBT observed in the inner lagoon is from historical uses and possibly sediment. Tributyltin measured at five of the six sampling locations was below the reporting limit (not detected). The commenters reference to the tributyltin shown in Table 1 of the Water Quality Report (page 19) and in the EIR text on page 53 is a measured level of 13 nanograms per liter (ng/L, or parts per trillion) in the Inner Lagoon in May 1995. A value of 5 ng/L, as a 30-day average,

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has been recommended as an objective in the 1995 Basin Plan Amendment as protective of human health. The 13 ng/L level in the Inner Lagoon of the harbor is from a single sampling event and therefore cannot be compared to a 30- day average. The average could be higher than the single event or it could be lower. The Inner Lagoon is also the furthest point in the Harbor from the Aquatic Park and has high residence time (very little water circulation). The area to be dredged would be in the Main Basin, located closest to Aquatic Park, where the May 1995 water sample did not detect tributyltin. Removal of sediment in the project area will reduce one potential source of existing TBT in the Harbor. Previous Port dredging in the Harbor used clam-shell-buckets to minimize suspended solids being transported to Aquatic Park.

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b. Water Quality-Sediments/Dredging

Sediments/Dredging

Comment

“The impacts of construction and dredging will mobilize any sediments, which can contain lead-based ores, arsenic, solvents acids, PCBs, petroleum products, paints, mercury, cyanide and other toxic industrial wastes (DEIR, page 102, 146-162), many of which were dumped into the Bay over a century ago. Once mobilized by the dredging and construction activities and suspended in water, these toxic substances can be carried by tidal action into the Bay, where they can endanger the health and safety of swimmers and the aquatic environment. The DEIR fails to analyze or adequately consider these important issues. The DEIR attempts to justify its failure to address these issues by making the irrelevant statement that during the maintenance dredging operation last year the "... Port received no complaints . . ." (DEIR, page 122). Yet the EIR also states that "... fish exposed to suspended sediment in the laboratory have been shown to suffer mortality as well as sublethal signs of stress." (DEIR, page 125). It is also noteworthy that the Port "will continue not to conduct dredging activities during the herring season" (DEIR, page 168).” (Linda M. Sheehan, written comments)

“Finally I cannot agree with the conclusions reached regarding the suitability of the dredged sediment materials for disposal at the Alcatraz site or the assessment of its impact on people swimming in the area where the dredging occurs. Certainly, the release of the fine grained materials at the dredging site, which is likely to contain more of the contaminants, will be considerable and will produce a plume that will affect areas in the vicinity used for swimming for some time. There is no adequate assessment of this short term impact. Also, in my opinion, it is not acceptable to treat the sediment material as appropriate for disposal at Alcatraz simply on the basis that it is no more contaminated than the average material presently disposed there. Finally, I was unable to find in the report the bioassay data for these particular sediments that would be required for disposal under the Clean Water Act.” (Dr. Douglas A. Segar, written comments)

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b. Water Quality-Sediments/Dredging

"In this context the present EIR on this project presents some alarming and disturbing problems. They revolve around dredging, disposal of dredge spoils, oversight of operations, and maintenance. The good news is that the EIR also scientifically indicates that the water quality in the Aquatic Park area is currently very good. "The calculated risk associated with swimming in Aquatic Park is also lower than the "significant risk level" established by the Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop. 65), which is one excess case of cancer in an exposed population of 100,000 persons." Page 55/56 of the EIR. This section also indicated that it is more dangerous to drink tap water than it is to ingest bay water while swimming in Aquatic Park. You should know that this fits in with anecdotal experience shared among swimmers. Over the years there is a general belief that water quality has gotten better and better in the Aquatic Park area. Major exception to this has occurred only when there has been "maintenance" dredging activities in our area or times when dredge spoils dumped off Alcatraz Island are brought our way on flood tide due to storm conditions.

Currently the EIR estimates that the project would require approximately 20,000 cubic yards of bottoms sediments would have to be dredged. Without engineering containment or controls, this process would suspend these sediments, cause turbidity and combine with normal tidal action to spreading them well into the Aquatic Park swimming area. Page 125 of the EIR states that "fish exposed to suspended sediment in the laboratory have been shown to suffer mortality as well as sublethal signs of stress.

On page 122, the EIR seems to indicate that water quality would not be negatively affected because in April of 1995 maintenance dredging operations occurred in which no reported degeneration of water quality occurred. "...That maintenance dredging operation lasted five to six days and involved removal of about 17,000 cubic yards of sediment...The Port received no complaints related to the dredging activity...

First off, calling the Port every time there is a problem with water quality in the Aquatic Park area is not what most swimmers do, they would call a responsible agency like Baykeeper.

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Secondly, the maintenance dredging that occurred did not dredge "bottom sediments" as this project proposed to do.

Third, the EIR indicates on page 106 through 108 that these bottom sediments would most likely contain buried waste dumped into the bay from industrial operations which have occurred in the project area over the last 125 years. The results of "bore sampling" listed on page 147 of the EIR indicate that these wastes would likely include lead paint, petrochemicals, petroleum related compounds, arsenic, solvents, acids, cyanide, smelters slag compounds, various heavy metals, PNA's, pesticides and PCBs. This is a veritable "witches brew" of deadly chemicals and compounds.

In light of this, I strongly advise that these dredging activities be reviewed to make sure that they are really necessary to create the project. Fishing boats easily go in and out of the project area now. An alternative plan should be designed which does not require the significant dredging of bottom sediments in the "Outer Lagoon" or "Main Basin" or the project area. It would be environmentally sounder and probably economically more feasible to develop a plan which would build over existing toxic sediments and on to existing rock. This would further encasing and encapsulating these toxic sediments instead of stirring them up.

Further, what ever dredging operations occur in the future, engineering controls and containment procedures should be in place so as not to allow toxic contamination from suspended solids and turbidity to degrade water quality in the Aquatic Park area. The U.S. Army Corps of Engineers (COE) and the Regional Water Quality Control Board (RWQCB) have control over and issue permits for this activity. Note should be made that the construction activities involved in creating the breakwater in the mid 80's significantly and negatively impacted water quality in the Aquatic Park area. Further pile driving activities which lasted several months polluted the air with diesel fumes and caused noise pollution which lasted 8 hours a day during this period.

This breakwater hooks into the Aquatic Park area and extends east past Pier 45 and currently defines the northern perimeter of the Main Basin within the project area. Neither the U.S. ACE

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b. Water Quality-Sediments/Dredging

or RWQCB paid close attention to the breakwater projects and its impacts on the environment while it was under construction.” (Daniel Macchiarini, written comments)

Response

The DEIR (page 121) indicates that dredging would be conducted under permit conditions required by the U.S. Army Corps of Engineers, BCDC, and the Regional Water Quality Control Board. Permit conditions would include sediment testing and water quality certification by RWQCB prior to dredging. Regulations for sediment disposal from dredging are further described in Appendix E, page A 63 of the EIR. The EIR also provides a table in Appendix B showing a summary of sediment characterization for two samples taken within the harbor in 1994 showing that the concentration of chemicals in harbor sediments is within the normal range of concentration found in the San Francisco Bay and concentration limits were not exceeded in the toxicity testing.

Testing done by the Port in the last two years has shown relatively clean sediment chemistry to minus 20 feet in Fisherman’s Wharf West Lagoon and Inner Harbor. Sediments from the Fisherman’s Wharf West Lagoon, west approach, and Inner Harbor did not show levels of metals or organics that were near any regulated levels. The sediments were not toxic to aquatic life in either the elutriate tests or the solid phase bioassay tests using the amphipod *Ampelesca abdita*. The Port has been able to dispose of sediments at Alcatraz Disposal Site, meaning that the most restrictive standards for sediment quality have been met. All dredging is subject to stringent testing requirements and results are reviewed by a committee of staff scientists from the Army Corps of Engineers, BCDC, Regional Water Quality Control Board, and U. S. Environmental Protection Agency. If elevated levels of contaminants were present, these agencies would require the Port to take appropriate steps to prevent water quality problems, such as alternative disposal options, screening the dredge site using suction dredge.

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b. Water Quality-Sediments/Dredging

The commentor has used incomplete references from the EIR to make a point. The reference to the 'Port receiving no complaints', does not reflect the detailed information in the EIR about the regulatory process described for dredging, and the data from actual sediment testing in the harbor that shows that previous dredging has met all regulatory requirements. The temporary impacts associated with dredging (such as increased levels of suspended solids or turbidity), as discussed on pp 121-123 of the EIR, would not be expected to result in noticeable water quality effects based on effects experienced during the April 1995 maintenance dredging and on the water quality determination by the Regional Water Quality Control Board. The Port would notify the Dolphin Club prior to dredging activities, and would schedule dredging to avoid special activities of the Club. This was done during the maintenance dredging and 'no complaints were received'.

The other incomplete reference made by the commentor is to fish mortality, page 125. The following sentence, after the one quoted, is "However, fish have the ability to move and avoid the area in response to sediment turbidity (unlike in a laboratory). Adult fish would likely escape from areas of high turbidity and continue to avoid the area as long as sediment suspension persists."

See page A .35 for a summary of sediment characterization. Short-term effects of dredging are described on page 121 of the EIR. Also described are the permit conditions that would need to be met for dredging (pages 43-44), including the possible requirement for silt screens or other measures to control suspended solids, if necessary (pages 121-122) The Port would notify swimmers well in advance of dredging to alert them to possible incidental transport of sediments to Aquatic Park.

The Bay Conservation and Development Commission, Regional Board, and Army Corps of Engineers have permit authority over dredging in the Bay, and review of

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b. Water Quality-Sediments/Dredging

sediment chemistry analysis, solid phase and elutriate bioassay test results are required before every dredging episode. The Port has performed all required bioassay work before performing maintenance dredging at Fisherman's Wharf. Sediment analysis conducted in October 1994 in the Fishermans Wharf area indicated that bioassay results were within acceptable ranges (Advanced Biological Testing, 1995). Contrary to the commenters statement disposal at Alcatraz is based upon rigorous agency review of bioassay results, so disposal at Alcatraz would not be possible without bioassay results.

It is not anticipated that the Port would encounter sediment with elevated levels of contaminants in the project area based on previous testing of sediments in the Harbor. Testing done in the last two years has shown relatively clean sediment chemistry to minus 20 feet in Fisherman's Wharf West Lagoon and in the Inner Harbor. Sediments from the Fisherman's Wharf West Lagoon and Inner Harbor did not show levels of metals or organics that were near any regulated levels and the sediments were not toxic to aquatic life in the elutriate tests and the solid phase bioassay tests using the amphipod *Ampelisca abdita*.

The Port has been able to dispose of sediments at the Alcatraz disposal site, meaning that the most restrictive standards have been met for sediment quality. All dredging is subject to testing requirements and the results are reviewed by the Army Corps of Engineers, BCDC, Regional Water Quality Control Board, and U.S. EPA. If any problems were encountered, such as disposing of material upland, screening the dredge site and use of suction dredge or clam shell would be proposed by the Port to mitigate potential impacts.

Sampling Program

Comment

“Boat repair practices such as sanding, painting and engine repairs are routinely observed in the Harbor. These activities are often conducted from floats tied off to the boat under repair. The DEIR presents no data on this source of water and sediment contamination or the human health hazards it presents. Samples of effluent from these activities should be captured and analyzed for content and quantity.” (Margaret Reilly and Roger Beers, written comments)

Response

The 1995 sample locations were selected to evaluate six representative areas of the project, including the fishing harbor and outside the harbor in Aquatic Park and to the west of Aquatic Park. Samples of the water in the Inner Lagoon, Outer Lagoon and Main Basin of the Harbor were collected to evaluate the existing water quality conditions and to determine the cumulative impact of commercial fishing activities on water quality. The sampling program did not attempt to sample each potential source of pollution and then model or estimate the fate of each source upon discharge to the Harbor (which would be logistically difficult, scientifically questionable and very expensive). If the existing or historic boat maintenance activities have caused a long-term impact to the water quality in the Harbor, their effect would be expected to be observed in the water quality sampling results. Data from sampling (shown in Appendix B, page A.32) were analyzed for conventional water quality parameters, as well as, organic tin compounds, petroleum-related hydrocarbons, and metals commonly associated with boating activities. Other than in the Inner Lagoon, which is located furthest from Aquatic Park, no organic tin compounds were detected at any of the other five sampling locations (including the Main Basin, nearest Aquatic Park). Sediment chemistry work performed for maintenance dredging in the Inner and

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b. Water Quality-Sampling Program

Outer Lagoon did not show elevated levels of metals or organic tin compounds in sediments.

Comment

“The 1995 tests that were conducted are flawed and do not support any conclusions regarding the project’s impacts on water quality. The Port has again failed to consult with those most knowledgeable about local conditions most likely to produce pollution in Aquatic Park.”

(Margaret Reilly and Roger Beers, written comments)

Response

The EIR consultant, Woodward-Clyde Consultants (WCC) developed the water quality sampling program based in part on their review of the Water Quality Management Plan (including the sampling plan) submitted by the commentors, plus comments submitted on the previous water quality sampling conducted by Bendix Environmental Research. The sampling program prepared by WCC was peer reviewed by the EIR technical team (SOMA, MEC, Orion Environmental) and by OER, and the Bureau of Water Pollution Control prior to approval to conducting the sampling program. Sampling was conducted during the tidal conditions suggested by the commentors, using standard, approved methods. Results of the sampling event were intended to assess the existing water quality in the project area for constituents of concern and indicate the historical effect of boating activities in Hyde Street Harbor to Aquatic Park.

Comment

“Because of deficiencies in the [water quality sampling] methodology and analysis conducted in the report, it’s not sufficient to arrive at meaningful conclusions for any of these purposes.”

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b. Water Quality-Sampling Program

“Woodward-Clyde took a single set of samples at one location, then moved on to the next location, and then the next and so on. As a result, the data generated does not span a sufficient amount of time or conditions to provide any meaningful picture of the relationship between what was found in the Inner and Outer Lagoons to Aquatic Park. Nor does it even provide a picture of the contemporaneous conditions that existed at these different sampling points.” (Margaret Reilly and Roger Beers, written comments)

“My conclusions are as follows: First, the single sampling event conducted by Woodward-Clyde Consultants in May 1995 is statistically totally inadequate and is virtually meaningless for purposes of establishing the nature of chemical contamination in Aquatic Park and the Harbor area, the range of concentrations at which contaminant occur, the sources of these contaminants, and the fate and transport of these contaminants. Because only a single sample was taken at each location, there is no way to determine the temporal variability of contaminant concentrations or whether the single sampling provides data that even remotely representing the mean concentration. Reliance on a single sampling event is an egregious scientific error, particularly where the sampling is done in bodies of water subject to substantial tidal exchange, as is the subject area. It is well known that constituent concentrations generally vary greatly over time and under different tidal, climate, and weather conditions in such locations. (Dr. Douglas A. Segar, written comments)

Response

As noted on page 15 of the Water Quality Study, “the purpose of the water quality sampling was to : (1) assess water quality in the project area for constituents which may be affected by the proposed project and are of potential concern to those involved in water contact recreation, particularly Aquatic Park; (2) assess water quality in Aquatic Park for constituents which may be affected by the proposed Hyde Street Harbor and Pier 45 improvements; and (3) assess water quality outside of the area of immediate concern for comparison with the project area and Aquatic Park.” A further objective of the sampling program was to

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establish monitoring locations, physical conditions and a quality assurance protocol for future sampling (for potential long-term or future monitoring of the harbor if deemed necessary). The sampling program also establishes a format for reporting future water quality conditions, and identifies the regulatory criteria and objectives for a salt water environment used for water-contact recreation. The sampling program was designed to characterize water quality during conditions that would favor the transport of water from the Harbor to Aquatic Park.

As discussed in the EIR pages 50-53, data from the water quality sampling event in the project area collected in May 1995 were compared with Basin Plan objectives and with data from previous samples taken in the project area. The data indicate that the water quality in the project area does not exceed the Basin Plan water quality objectives, and with the exception of dissolved copper levels at two sampling locations, the data do not exceed the U.S. EPA water quality standards (the water quality standard for copper in San Francisco is under review). The quality of the water in the project area is generally within the same range as water quality data from nearby parts of San Francisco Bay collected in 1993 as part of the Regional Monitoring Program (page 50, EIR).

Concentrations in the water column are likely to be variable. The sampling design was not an attempt to characterize this variability. In fact, timing for sample collection was chosen which favored maximum accumulation in the Harbor and transport into Aquatic Park (neap tide and ebb flow). Complete characterization of the variability of water quality in the Harbor and Aquatic Park is beyond the scope of this EIR and would likely involve an extensive multi-year study of the interaction of tidal, seasonal, meteorological, and episodic events. The single event sample taken by WCC was compared with data from the Regional Bay Monitoring Plan, and with the information analyzed from the monitoring for bacteria that included over 200 data points. The commentors do not present any data or facts to refute the information in the EIR.

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The Port is currently investigating a cooperative long-term monitoring program with the Bureau of Water Pollution Control for bacteria sampling in the project area that would add sampling off the dock and Hyde Street Pier for enterococcus. The Port is also considering a request to the Regional Monitoring Program to add a station in the harbor area. Such monitoring will be discussed with the newly formed Environmental Quality Advisory Committee for the Harbor.

Comment

“The DEIR presents no data on this [boats]source of water and sediment contamination or on the human health hazards it presents. Samples of bilge discharge from vessels in the harbor should be captured and analyzed for content and quality. Absent that analysis, it must be assumed that bilge water discharged by the existing fleet is a significant source of bacteria, petroleum product and other pollutants which are health hazards to humans who use Aquatic Park water.”

(Margaret Reilly and Roger Beers, written comments)

“I have one concern and one point to make regarding the environmental report, and that is, in discussing the cleanliness of the water, the only tests we have done was for coliform bacteria, E. Coli. And as I think we are learning increasingly in the world we are living in, the air, the water, the soil has changed similarly over the last hundred years, and I think it's very important to consider the trace minerals that may be in the water, things that come from the petroleum products of the boats, and even that which is stirred up when any dredging is done along the shore. I think this is very important, and medicine is recognizing this more and more as time goes on. And I certainly think it is not proper on the part of people developing this area to not consider what may happen in terms of carcinogens, things that cause lung and cardiac disease and so forth. I thank you for your attention.” (John Beale, verbal comments)

Response

Laboratory results of water quality samples (Table 1, Appendix B) taken at four locations in the harbor and in Aquatic Park did not indicate exceedances of

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threshold levels of various compounds established for recreational water in the Basin Plan, nor did the risk assessment indicate concentrations of compounds present were considered hazardous to human health. Sampling of potential sources of contaminants to the Harbor, such as bilge water, was beyond the scope (and budget) of the one time sampling event conducted for this EIR. The absence of this data neither confirms nor denies any cause and effect relationship between bilge water and the water quality in the harbor. Discharge of bilge water to the Bay is strictly prohibited (thought difficult to enforce) as discussed on pages 115-119 of the EIR.

In addition to coliform bacteria, the May 1995 sampling included a suite of analyses including total and dissolved metals, temperature, salinity, pH, turbidity, total suspended solids, biological oxygen demand, total coliform, fecal coliform, enterococci, total ammonia nitrogen, trace metals, polynuclear aromatic hydrocarbons, organotin compounds, organophosphorous pesticides and petroleum-related hydrocarbons including total petroleum hydrocarbons as gasoline, total petroleum hydrocarbons as diesel, benzene, toluene, ethylbenzene and total xylenes. See Sampling Results, pages 50-54, and Appendix B, pp. A.35-A.34, of the EIR.

Comment

"Instead, the EIR does little more than compare water and sediment samples taken in the Harbor and Aquatic Park with data taken elsewhere in the Bay and with rainfall and fish landing data. Absent analysis of effluent from existing Harbor activities, all discussion in the DEIR regarding sources of Harbor water and sediment contaminants, and the likelihood of increase of same, is speculative at best. Accordingly, there is no substantial basis for the DEIR conclusion that Harbor water quality and sediments will not be affected by continuation of existing activities, or by the changes and increases in those activities (and by the new activities) caused by the project." (Margaret Reilly and Roger Beers, written comments)

Response

The proposed project is a modification of existing activities in the Harbor and on Pier 45, rather than the introduction of a new activity. Considering the multitude of activities that can cumulatively affect water quality in the Harbor (such as commercial and recreational boat operation, vessel maintenance and refueling, fish landing and handling, storm water runoff, wash down of aprons / piers / boat decks, equipment failures, leaking pipes, and illegal discharges to the Bay) the EIR addresses the project area waters as the receiving basin for all pollutants rather than separating out each individual contributor. The association between 'cause and effect' is made in the analysis of water quality parameters sampled and specific activities that contribute to each parameter. For example, classes of pollutants associated with the above referenced activities include bacteria and BOD, nutrients (ammonia), petroleum products (diesel, hydraulic oil, motor oil, mono and polynuclear aromatic hydrocarbons), and metals. Impacts to water quality from the proposed changes to the existing activities and facilities in the project area are discussed in the EIR, Section IV. Environmental Impacts, B. Water Quality, on pages 111-123. Under the proposed project the changes to the Harbor would include adding berthing in an area of the Main Basin that has historically been used by boats on a daily basis to access the existing fueling dock and Outer Lagoon.

Comment

"The Negative Declaration attempted to minimize these problems by stating, for example, that the water samples tested did not establish the presence of chemical levels indicating fuel leakage or spillage. This failed to take into account, first, the fact that the Inner Harbor was not tested by the consultant and this is where much of the fishing boat activity currently occurs. Second, the consultant's conclusion that no permanent contamination had taken place does not negate the fact that leaks and spills regularly occur which produce temporary contamination which is a

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significant impact to the Commenters and other members of the public seeking to enjoy Aquatic Park. Finally, no testing was done for surface films, which are frequently observed by Club members. (Margaret Reilly and Roger Beers, written comments)

Response

The sampling conducted in May, 1995 for this EIR included a sample collection in the Inner Lagoon, noted on Figure 11, page 49 of the EIR as location No.1. Water Quality sampling results indicate that total petroleum hydrocarbons were not detected during this one time sampling event. The EIR does not state any conclusions regarding 'permanent contamination' since the purpose of the sampling was to assess the existing water quality conditions. The EIR, page 115, discusses the potential for leaks and spills to occur in the Harbor. Page 53 of the EIR, last sentence of the first paragraph, states that "During sample collection, the field observations noted an organic sheen apparent in the Inner Lagoon (Station 1) and in the vicinity of the Outer Harbor (Station 3), but none was noted at any of the other stations." Surface films were intentionally not sampled (see EIR, p. 50) because they were determined not to be representative of the portion of the water column most often contacted by swimmers. Instead, samples were collected about six inches below the water surface to simulate the mixing of surface films and the top layer of water that occurs during swimming.

Comment

"The water quality tests and analysis conducted and relied upon in the DEIR as to current water quality are so flawed as to have no credibility. They cannot be relied upon to support any conclusions regarding the water quality in the Project Area or in Aquatic Park. In addition, the apparent ineffectiveness of the Port's current enforcement and policing practices must be evaluated in the context of the existing and proposed activities in the Project area. We concur with the comments submitted by the Dolphin Club with regard to this DEIR and rather than

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restating them here, we hereby incorporate them by reference.” (Laura Taylor, written comments)

Response

The EIR and the technical Water Quality Study, specify all of the assumptions and methods used in the water quality sampling plan. Sampling and analytical methods used were standard, approved techniques, and reference include APHA-WPCF “Standard Methods for the Examination of Water and Wastewater, 17th Ed., American Public Health Organization, Washington, D.C. 1989”; EPA “Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1983”. The sampling program was peer reviewed by the EIR technical team (SOMA and Orion Environmental Associates), the Bureau of Pollution Control, Office of Environmental Review, and the Port Environmental Health and Safety Officer prior to conducting sampling.

The Port is proposing, as part of the project, an increase in harbor supervision from five days a week to seven days a week, and has committed to 24 hour supervision. The Port has also established an Environmental Quality Advisory Committee for the Hyde Street Harbor area to assist the Port in ‘monitoring’ conditions in the project area to ensure that improved enforcement and policing actions are effective in improving existing conditions. The Committee will also provide recommendations on future actions to be taken by the Port to address potential environmental issues in the Fisherman’s Wharf project area.

Comment

“Yes, I think the general discussion about the adequacy of the water quality samples; I am concerned it's accurate that water quality sampling was only done on one day at one time. I'm looking for clarity on that, if that was an accurate representation. And also the issue of times at

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which the samples were taken, also the number of samples and the various locations. That's my primary concern." (Commissioner Kelly J. Hayden, verbal comments)

Response

See responses above (C&R page 68) regarding the objectives of the sampling plan, the methods, sampling locations and sampling results. In addition to the May 1995 sampling conducted by Woodward-Clyde Consultants for this EIR, SOMA Corporation conducted an analysis of previous coliform sampling data provided by the Bureau of Water Pollution Control. The City's data represented the most extensive coliform data available for the study area. Samples for coliform were collected by the City four times weekly over a twelve-month period. This type of information was valuable in evaluating correlation of water quality conditions in Aquatic Park with physical parameters in the harbor area that could affect water quality, such as rainfall, tides, waves, currents and the use of the harbor potentially associated with the volume of fish landed at Pier 45. This information was important background to information used to establish the protocol for the May 1995 water quality sampling program.

Data from the one-day sampling event was compared primarily with Basin Plan water quality objectives for recreational contact water, and with EPA standards and available Regional Monitoring Plan information. The analysis also considered information from previous sampling in the area (City coliform data and the 1988 Water Quality Study completed for the previous Negative Declaration). The comparison with Basin Plan objectives was to see if there were any water quality parameters that appeared unusually high, that would warrant additional sampling for the EIR. The consensus among the EIR technical specialists and the City's peer reviewers was that the data was consistent with Basin Plan objectives and that there were no water quality parameters that appeared unusually high that warranted further sampling for the EIR.

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Comment

"No one from the Dolphin Club was consulted about the tests that were done in 1995 by Woodward-Clyde. The 1995 test conducted by Woodward-Clyde were taken under the conditions which Commenters had advised the Port were least likely to detect pollution conditions in Aquatic Park.

In the Dolphin Club's Scoping Comments we examined in great detail the conditions that are most likely to produce the maximum opportunity for the transport of significant pollutants into Aquatic Park. The Club noted that one condition which inhibits the flow of pollutants into Aquatic Park is wind from the northwest. As we stated in those comments: "The wind is a factor because when it is from the northwest, it tends to bottle up the surface waters in the inner lagoon, and pollution from that source is not as noticeable even under ebb current conditions." Scoping Comments at 18.

Yet, this is *precisely the condition* under which Woodward-Clyde took the only test that were performed in 1995 for the DEIR. (p. 50). The DEIR never acknowledges the Dolphin Club's earlier advice to avoid this circumstance or that it would tend to inhibit findings in Aquatic Park. Instead, the DEIR skirts this issue disingenuously by simply asserting that "locally-generated wind waves could affect water currents from the harbor to Aquatic Park."

In its Scoping Comments, the Dolphin Club stressed that "it is important to take a sufficient number of samples of the appropriate parameters in order to ensure that the data collected is capable of providing a basis for general extrapolations to the conclusions sought" and that "problems immediately arise with moving bodies of water when a very small number of samples are taken." Scoping Comments at 31-32. Thus, we suggested that the sampling include the far less expensive test required for BOD, Turbidity and Suspended Solids, and that sampling be conducted "over a 24 hour or longer period, with sampling conducted on the hour or half-hour at each sampling location." *id.* at 32." (Margaret Reilly and Roger Beers, written comments)

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Response

The sampling conducted for the EIR included tests for biochemical oxygen demand (BOD), turbidity, and total suspended solids, as suggested in the Dolphin Club's Scoping Comments. The scope and objectives for the sampling plan are described on page 2 of Appendix C of the Water Quality Study, and clearly reflect that the Dolphin Club suggestions for sampling were reviewed and incorporated into the sampling plan. Sampling times were selected such that they favored both maximum accumulation of pollutants in the harbor area (neap tides) and maximum transport into Aquatic Park (ebb flow). Wind conditions at the time of the sampling could not be predicted during the planning prior to sampling which needed to occur one week prior to the scheduled sampling to allow for scheduling of boat time and coordination with the analytical laboratories. Sampling was scheduled for the early morning and late afternoon when winds are generally light. However, as the commentor points out prevailing winds often occur from the northwest (as was the case during the sampling). As such, sampling while wind was coming from the northwest is representative of conditions which often occur in the Project Area.

Twenty-four hour sampling was beyond the scope and budget of this study and would not necessarily provide additional relevant information, since seasonal as well as temporal variations occur in the project area.

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Bacteria/Enterococcus

Comment

“Third, the data reviewed in the Draft Environmental Impact Report and Water Quality Study on coliform does not establish - contrary to the conclusions reached - that it comes from the west as opposed to the Inner Lagoon and Outer Harbor area. More importantly, there has been an insufficient number of sample events and sample locations for enterococcus, which is clearly more useful than coliform testing for judging the impact of the water quality in the area on swimmers or others who come in contact with the water. The enterococcus data is more useful in this respect because studies have established a high correlation between its presence and various adverse health effects. Moreover enterococcus is longer lived in the water and is more indicative of human fecal material.

From the limited testing that has been done, the enterococcus data give me pause as to the suitability of this area for swimming under the present water quality conditions. If one compares, for example, the standards for enterococcus developed in Hawaii to account for protection of swimmers, it is clear that those standards are violated in a number of instances according to the existing data.” (Dr. Douglas A. Segar, written comments)

Response

The analysis of enterococcus was performed as part of the 1995 water quality sampling conducted for this EIR at six locations in the project area (including in Aquatic Park). One (Outer Lagoon) of the six sample locations exceeds the Basin Plan objective for enterococcus. The Basin Plan steady state objective is 35 MPN/100ml (the EPA maximum level for a designated beach in salt water is 104 MPN/100ml) and the level in the Outer Lagoon sample was 50 MPN/100ml (higher than the steady state objective but lower than the maximum level). The sample in Aquatic Park taken the same day was <2 PN/100ml.

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A statistical evaluation of weekly coliform data from the SF Public Works Department, covering a period from September 1991 through October 1992, conducted by SOMA Corporation (Appendix G of the Water Quality Study) indicated that, based upon available information, there were no statistically significant correlations during neap tide between the coliform concentrations found in the Hyde Street Fishing Harbor/Pier 45 area and Aquatic Park. Statistically significant correlations were detected between Aquatic Park and the control stations to the west of Aquatic Park. The use of a coliform evaluation for the statistical analysis, rather than an enterococcus evaluation, was performed because of the availability of the coliform data (a total of 199 sampling events in Aquatic Park at a frequency of four times per week). Comparison of the fecal coliform and enterococcus data collected in May 1995 with Basin Plan and EPA water quality criteria is presented in Table 1 on page 19 of the Water Quality Study. Of the 199 samples collected by the SF Public Works Department in Aquatic Park in 1991-1992, seven samples exceeded the Basin Plan objective for coliform.

With reference to the State of Hawaii's limit : "In marine recreational waters within one thousand feet of the shoreline, including natural public bathing or wading areas, enterococci content shall not exceed a geometric mean of seven per one hundred milliliters in not less than five samples equally spaced over a thirty-day period." (Hawaii Final Regulations, 11-54-08). A single sampling event would not provide sufficient data to determine conformance or violation with this standard.

Comment

"The SOMA Report (p. 114, FN4) and historic bacterial contamination data collected by Dept. of Public Works shows a range of bacteria levels in the Harbor over the course of the year, sometimes meeting and sometime exceeding compliance standards. High levels correspond with

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rainfall. High levels also occur at other times including non-rainfall periods. The data indicates continuous presence of bacteria in the Harbor. The DEIR lacks any investigation of the likely sources within the harbor of this coliform bacteria. Absent investigation of in-harbor sources, it must be assumed that the cumulative activities in the Harbor area contribute to the continuous presence of elevated bacteria levels. As set forth in the comments of Dr. Segar (Appendix G), a more fundamental flaw in the analysis done by the Port is the failure to provide sufficient sampling and analysis of enterococcus. He concludes that the data developed so far of this gave him "pause" as to the existing suitability of the water quality in the area for swimming. Clearly, the Port must do more to sample and analyze this parameter." (Margaret Reilly and Roger Beers, written comments)

Response

The analysis of enterococcus was performed as part of the May 1995 water quality sampling at six locations (including Aquatic Park) in the project area conducted by Woodward-Clyde Consultants for this EIR. The statistical evaluation of weekly coliform data taken from September 1991 through October 1992 and reported in the North Point Bacteria Weekly Report was conducted by SOMA Corporation (Appendix G of the Water Quality Study). The analysis of data included the potential effects of rainfall by stratifying the data set according to rainfall during the previous 24-hour period (rain days) and no rainfall during the previous 24-hour period (no-rain days). The study indicated that, based upon available information, the amount of rainfall during the previous 24-hour period was significantly correlated with coliform concentrations at Aquatic Park and the control stations west of Aquatic Park but not with concentrations at the Project Area locations. (see Table 8, Appendix B of the 'Statistical Evaluation Aquatic Park Coliform Data' by SOMA Corp., April 1995 in Appendix G of the 'Water Quality Study completed for the EIR). Table 1 of the same Study, shows 7 of 199 samples that exceed the 1000 MPN/100ml objective for total coliform in contact recreation water.

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The use of a coliform evaluation, rather than an enterococcus evaluation, was performed because of the availability of the coliform data (a total of 199 sampling events in Aquatic Park represented four samples per week) from the Bureau of Pollution Control, City and County of San Francisco. Comparison of the fecal coliform and enterococcus results to the Basin Plan and EPA water quality criteria is presented in Table 1 on page 19 of the Water Quality Study.

The enterococcus group is a subgroup of the fecal streptococci and is a valuable bacterial indicator for evaluating the extent of fecal contamination of recreational surface waters. Because the enterococcus group appears to be primarily associated with human fecal material, the presence and concentration of enterococci in water collected from the project study area is a valuable parameter to evaluate. This is why the samples collected during the 1995 water quality sampling included analysis for enterococcus as well as fecal coliform and total coliform.

Comment

"The DEIR and WQS contain outright errors in stating the "no fish waste is washed off the apron[s] into the Bay" (DEIR p. 115; WQS p. 38) and "[n]one of the fish wastes drain or are discharged to the Bay." (*Id.*) These practices are common, tolerated and allowed by the Port to continue under its "self-policing" enforcement style (p. 116). Yet, the DEIR relies on the above assertions to avoid all further analysis of the impacts of these practices as they exist and may be increased by the Project.

Moreover, the DEIR provides only a sketchy and incomplete analysis of the extent to which the Project can be expected to increase fish handling and processing activities. First, the DEIR focuses only on "fish landings" as the basis for its conclusions. However, fish landings account for only a small percentage of the seafood actually handled and processed in the area. However, this is largely speculative since the data does not allow any conclusion as to whether declines at

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other ports would have been larger without relocation of the industry from Fisherman's Wharf, and whether there will be a return of at least part of this industry with the upgrade of facilities in the Project. (Margaret Reilly and Roger Beers, written comments)

"We further note that the DEIR is wrong in stating that ". . . no fish waste is washed off the apron into the Bay" and that "None of the fish wastes drain or are discharged into the Bay. (DEIR, page 115). Several of our members watched this occur during the May 21, 1996 Port tour of the proposed Project area, yet the DEIR relies on such false statements to avoid further analysis of the impacts of these activities. It is interesting to note that the DEIR admits that "[s]ome dumping from boats may occur." (DEIR, page 116). As noted above in Para III.A most water quality impacts are sidestepped in the DEIR by relying on the incorrect assumption that the Project is not anticipated to generate any increase in the number of vessels in the harbor." (Laura Taylor, written comments)

"Also, if you walk on the docks, you will see the Port does not police these water quality issues. On any given day, you can witness dead fish being washed off the decks of fishing vessels and sewage being washed into the harbor by punched out drains. If the Port can't take care of these apparent uses, I doubt they will be able to police a larger harbor." (Jeanine Dubois, verbal comments)

Response

The EIR discusses the fish handling activities, and potential increases in this activity on pages 114-115 of the EIR. The EIR consultants have visited the project area on numerous occasions in an attempt to observe the illegal activities described in the comment, and have not seen fish waste being washed off the aprons into the Bay. This does not imply that it might not happen. The fish handling facilities on Pier 45, in Sheds B&D have drains to collect fish waste within the sheds where all processing is done, and interviews with the processors pointed out that fish waste is a marketable product and is picked up twice weekly by truck to take to a rendering plant in Oakland to make fishmeal (see EIR, p.

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114). The fish landing information is discussed because it relates to use of the harbor (commercial fishing boats) and to the proposed project. Fish traded on Jefferson Street and brought into the area by truck is not part of the proposed project. This activity is included in the discussion of existing conditions (EIR pages 9-10).

The Port does not maintain data on the volume of seafood received by truck. Fish and Game maintain data on seafood landings in an area, but data by individual processors is confidential and not available.

Comment

“From the swimmers perspective, the greatest health danger they face is the presence of coliform which occurs when there are heavy rainfalls causing untreated sewerage to enter the outfalls. That problem has nothing to do with the fishing vessels, but rather is the result combined runoff/sewer treatment system that San Francisco processes.

However, the new waste removal facilities at the fishing harbor should benefit the swimming community, particularly if the fishing harbor is carefully monitored by the Port, and that appropriate measures are taken when and if waste is not handled properly. In Europe, there are devices which are able to detect waste when it is dumped in excessive quantities. However, I have been unable to find the presence of this technology in America.” (M. Toby Levine, written comments)

Response

The EIR discusses coliform in the harbor and Aquatic Park on pages 113-114. The EIR reports that the statistical analysis of 12 months of coliform data for Aquatic Park, Presidio and Crissey Field, with rainfall, and tidal conditions in the harbor indicated a statistically significant correlation of levels of coliform with rainfall data for the previous 24-hour period. However, correlations between

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coliform levels in the project area (Inner and Outer Lagoons) and rainfall were not statistically significant for the same period. No positive correlations were found between coliform data at any stations and fish/crab landings for the period between 1991-1992.

In researching potential measures to control illegal boat discharge in the Bay, Los Angeles County Health Department has implemented a 'No Discharge Dye Tablet Program' for all vessels entering Avalon Harbor to control illegal discharge of waste from the boat head into harbor water. All vessels entering the harbor are given a brochure explaining the program and the consequences of discharge (\$500 violation fee). Any owner/operator refusing to comply with placement of dye tablets in each individual dual head on the boat cannot be assigned a mooring within the harbor. The Harbor Patrol Officer places a florescent green dye tablet in each head aboard the vessel. The heads are then flushed several times to insure that the dye had reached the holding tank and the y-valve is switched to the holding tank position. Vessels with through-hull systems receive dye tablets with no test flush. Any discharge of dye after the placement of the initial tablet and test flush results in a citation being issued and the vessel being immediately expelled from the mooring in the harbor for a period of a year. (communication with John Phelps, Avalon Harbor Master, dated June 13, 1994). The newly formed Environmental Advisory Committee for the harbor may want to explore this further.

Additionally, all boaters would be encouraged to use the pump-out facility located at the foot of the berthing area, near the fueling facility.

Comment

"In my opinion, water quality is one of the main concerns if this project is allowed. If one takes a walk and surveys the existing pollution and general disregard of clean water by the fisherman,

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fisheries and tourist restaurants, one can only wonder why these industries would be rewarded with more berths, directly next to us. Many of the boats are old and leak gas and oil. Trash is commonplace and often blows if not thrown directly into the Bay. The EIR, on page 51, admits that the coliform bacteria present in human waste is possibly due to illegal and unsupervised discharges from fishing boats. The maximum coliform level for public beach or water contact sports is 1000 yet the chart in Appendix B (page A231) shows levels of 1600 in the Outer Harbor where many of the boats berth and they want to move closer to us.” (Lisa McCally, written comments)

Response

The commenters reference to ‘maximum’ coliform level for public beach or water contact sports is 1000 is stated incorrectly. As described on page 51 of the EIR and in footnote No. 13 on the same page, “the bacteriological standards for public beach or water-contact sports require that sample have a coliform level less than 1,000 Most Probable Number per 100 milliliter (MPN/100 ml, which is a statistical measure of the number of bacterial colonies) and no single sample shall exceed 10,000 per 100 ml”. The footnote describes the bacteriological standard even further by stating that the 1,000 per 100 ml is related to 20 percent of samples taken over a 30-day period. The footnote (b) for Table 1 on page A.32 is corrected to reflect this information. Also related to this comment, the coliform data collected in Aquatic Park in 1991-1992 (twelve months of data) showed seven of the 199 samples exceeded the 1000 MPN/100ml threshold.

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Microlayer Sampling

Comment

“We observed that testing that has been conducted for a period of several years by Battelle Laboratories regarding surface waters, that there is a respectable body of scientific opinion supporting this kind of testing, and that the surface testing done in other areas has shown that surface water quality is often significantly worse than that beneath the surface. (p. 34).

Nevertheless, the authors of the DEIR still refuse to perform that kind of testing which could provide information about the water quality most directly affecting swimmers. Again, the DEIR does not even acknowledge the Dolphin Club's earlier comment, or provide any response to the cited body of authority which has endorsed this sampling method. Rather, the DEIR concludes without further analysis that taking water samples six inches below the surface somehow "represent[s] the portion of the water column that is most often contacted by swimmers." (p.50). Obviously, we can only assume that the continued refusal to conduct this kind of testing reflects the Port's determination to avoid that kind of sampling which would be most likely to show the presence of the petroleum hydrocarbons and other contaminants so frequently encountered by swimmers at the Dolphin Club in Aquatic Park.

Again, Dr. Segar's attached comments in Appendix G underscore the lack of any justification for the failure to take surface samples, and the apparent intent to avoid sampling that would show the higher concentrations of chemicals to which swimmers are being exposed.” (Margaret Reilly and Roger Beers, written comments)

“Second, no adequate rationale is presented to justify taking samples in Aquatic Park at six inches below the surface. Indeed, for the following reasons, it is hard to conclude that this method was adopted for any reason other than avoiding detection of the higher concentrations that necessarily exist in the surface microlayer.

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The rationale stated in the Water Quality Report for sampling six inches below the surface was that the mixing action by a swimmer would necessarily disrupt the surface and that the swimmer would therefore be exposed to this mix within six inches of the surface. The consultants give no explanation for their choice of the six inch depth and provide no evidence to support the choice of this depth. Thus the choice of this depth appears to be arbitrary and scientifically unsupported. While sampling a mix of some depth of the upper water column (including the surface microlayer) may be appropriate for assessment of the potential for dermal exposure, it is entirely inappropriate as a method of gauging the concentrations of different chemicals in the water that are likely to be ingested by a swimmer.

In practice, a swimmer breathes in as his or her mouth comes above the surface and it is at this point that ingestion of water is most likely to occur. Thus, from the standpoint of the most likely source of exposure, sampling of the surface microlayer would come much closer to detecting the actual concentrations and chemicals to which the swimmer would be exposed. Moreover, sampling the surface microlayer is all the more important because this microlayer always contains higher concentrations of contaminants than are found in the water column.

Even if one accepted the rationale offered in the report that the upper six inches of the water column should be mixed and sampled this is not what was done by the consultant. In fact, samples were taken of the water column six inches below the surface by a method that specifically excludes any surface microlayer. This was achieved by inserting a closed sample bottle six inches below the surface and opening it to allow the water sample to enter. This procedure does not replicate in even a remote way the "mixing" conditions that the rationale is based on.

The consultant argues that the surface microlayer was not sampled because the concentrations of contaminants in this layer are likely to be variable. This is a specious argument, for the concentrations in the water column sampled by the consultant are also likely to be variable and the consultant made no attempt to assess such variability.

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Simply put, the sampling design wherein samples of the water column at six inches depth were the only samples obtained, and where only a single sample was obtained for each site is scientifically unacceptable and unsound. Moreover, this sampling program design significantly underestimates the concentrations to which swimmers will be exposed and, therefore, biases the risk assessment that was based on these results. The bias is such that the risk to swimmers is significantly underestimated.” (Dr. Douglas A. Segar, written comments).

In terms of the less dangerous but probably more aggravating problem to swimmers is the presence of engine oil mixed with water which floats on the surface of the fishing harbor. When the tides are right, the oil will move toward the swimming harbor.” (M. Toby Levine, written comments)

“The draft that you have before you, I believe, is intentionally deceptive in its water quality measurements. The authors know that there are pollutants on the surface. They intentionally tested waters below the visible pollutants. The report ignores entirely the fact that pollutants are absorbed mostly through the skin. You don't have to drink the water to be poisoned. The previous speaker pointed out that this is like building a gas station on the lip of a pool. It's worse. It's in the pool. Hyde Street Pier is not a barrier. Hyde Street Pier is a walkway. Right underneath is daylight, all but entire daylight. This is one body of water.” (Ken Coren, verbal comments)

Response

Water samples were collected between 2” and 6” below the surface. During the sample collection process, the actual dipping and filling of the collection bottle caused turbulence and mixing of the surface waters with any potential microlayer that could have been present. A portion of the immediate surface layer (which may have included a potential microlayer) may have been collected in the sampling bottles.

Water samples analyzed for hydrocarbons and benzene, toluene, ethyl benzene, xylene (BTEX), which would be the primary pollutants of concern in surface

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films/microlayer, were collected by submerging a Teflon bailer (plastic tube with a ball valve) through the surface of the water to a depth of approximately six inches. Consequently, the collected water samples represent a portion of the immediate surface layer, as well as, the surface water layer up to six inches. If a microlayer was present during sampling, the water sample collection process would have resulted in the partial collection of the microlayer as the bottle and bailer were submerged. These subsurface samples are used to represent the portion of the water column that is most often contacted by the swimmers as a result of the mixing of the top 6" of water that occurs during swimming.

The dermal absorption of chemicals through the skin is an important exposure route to evaluate. Ingestion of water during swimming was the other exposure pathway considered. The public health evaluation presented in Appendix E of the Water Quality Study includes an evaluation of direct ingestion and dermal absorption of the sampled water as potential exposure pathways (Tables D-4, D-6, D-9, D-10 and D-11). The risk assessment evaluation presented is consistent with U.S. EPA and Cal EPA methods and procedures. The screening-level quantitative risk assessment is such that it is very conservative in nature and is based on assumptions that overestimate actual site-specific exposure parameters.

Specific sampling of the microlayer was not conducted for the following reasons:

1. Collection of a representative microlayer sample is questionable due to several associated uncertainties. Firstly, surface films in the San Francisco Bay region are variable with respect to spatial and temporal distribution. The tendency for surface film formation is governed and restricted by several factors, such as surface wind and wave agitation. The study of coastal water microlayers (including the scientific parameters upon which their formation and composition are dependent) is a new arena of scientific research and little definitive scientific information or protocols exist. One area of uncertainty pertains to the

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contribution of atmospheric deposition to the composition of the microlayer, which in turn calls in question the representativeness of a microlayer water sample. The difficulties associated with the reliable scraping of a thin surface layer off a moving surface and the changes in wind speed and turbulence add to the uncertainty associated with the collection of a representative surface film sample.

2. The analysis of a potential microlayer would indicate the presence or absence of floatables, diesel oil or other surface pollutants at the time of sampling rather than provide representative pollutant concentrations for the main body of water in the project area. It would also not capture the volatile components potentially present in the water.

3. The microlayer is literally a few micrometers in thickness (one millionth of a meter or ten thousandth of a centimeter). Application of laboratory analytical results associated with microlayer samples to a risk assessment would require gross assumptions regarding the thickness of the layer and the representativeness of the samples, which is difficult to measure scientifically.

4. Visual observation of surface films have been reported which indicates that they occur. (See EIR page 53, last sentence of first paragraph). Consequently, surface films have been documented in the EIR, in addition to information on total petroleum hydrocarbons, and polynuclear aromatic hydrocarbons that were analyzed as part of the subsurface sampling.

Collection of samples from the subsurface is standard collection procedure used by researchers (e.g. Regional Monitoring Program for Trace Substances, S.F. Estuary Institute Annual Monitoring Report, 1995) and is a reliable method to characterize surface water quality, albeit excluding surface microlayer. Specific sampling of the surface microlayer was not performed because surface films are a

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visibly recognized problem in the Project Area and such testing is not necessary to confirm the visual observations already noted in the public record.

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Water Quality Conditions

Comment

“SERC is concerned with the existing degraded water quality in the Project area and in Aquatic Park and its impacts on the health and safety of swimmers. The primary sources of such degradation include discharges from the currently existing activities in the Project area including those listed above. The proposed project will not only continue but will increase such activities and add new activities which will further impact water quality in the Project area and in Aquatic Park.” (Laura Taylor, written comments)

Response

The EIR provides substantial information in the Environmental Setting section for Water Quality (pages 42 through 62) describing the physical conditions of water in the Harbor. This information is supported by a detailed technical study on Water Quality that also includes eight separate appendices, each aimed at providing the extensive information requested in the Dolphin Club and South End Rowing Club response to the Notice of Preparation. The preparers of the EIR reviewed available data for the project area from previous sampling of sediments, stormwater discharges, North Point bacteria weekly reports for coliform in Aquatic Park, and other water quality sampling (Bendix, 1989 and U.S. Corps of Engineers 1983 and Port Wet Weather Data, 1994). The EIR consultants also visited the project area during the early morning hours on numerous occasions in an attempt to observe actual discharge of fish waste from boats, washing off of oily waste from aprons of the pier or from boat decks, surface oil and floatables. The EIR consultant interviewed fish processors and inspected facilities for clogged drains, and illegal disposal of fish waste. The EIR consultants did not substantiate the issues identified by the commenters during these unannounced visits (on some occasions made with City representatives). However, they

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observed oil on the surface of the water on some visits to the Harbor area, and noted that drains along Fish Alley were clogged, some drained directly into the Bay, and machinery was stored outside some processing sheds along Fish Alley. (Fish Alley is in the project area but is not proposed for change as part of the proposed project, and therefore is not subject to impact discussion in the EIR). Oil on the deck of the fueling facility was observed.

Interviews with fish processors revealed that fish waste is collected routinely by an Oakland company that uses it to make fishmeal. None of the drains in the facilities on Pier 45 were clogged, and all screens were in place. Persons interviewed reported that health inspectors routinely inspect facilities for cleanliness. The aprons along the west and east sides of Pier 45 do not have drains or gutters to collect storm water runoff (that could contain oil and bacteria). This information is presented in the EIR on pages 114 and 115.

Samples of water quality in the Harbor revealed some elevated levels of copper, and one station with elevated levels of coliform. None of the samples taken in Aquatic Park exceeded Basin Plan objectives for recreational water. (EIR pages 50-54)

As a result of the issues raised during the environmental review process the Port has developed an initial list of 'action items' to add to the Best Management Practices (page 165 of the EIR). The Port has also established an Environmental Quality Advisory Committee to monitor and provide input to the development of additional actions that could be taken to improve existing conditions in the Harbor.

Comment

"The DEIR lacks analysis of the effects of this new location for berths and boats. The DEIR lacks meaningful analysis of the sources of existing degraded water conditions in the harbor, and

certainly lacks sufficient mitigation measures to address those conditions.” (Margaret Reilly, written comments)

Response

The location of the proposed floating berths is in the Main Basin (shown on Figures 5 and 6 in the EIR, pages 15-16) of the Hyde Street Fishing Harbor, adjacent to the existing fueling facility. This area of the Harbor is used by commercial fishing boats on a daily basis to access the fueling facility and the Outer Lagoon. Sources of potential pollutants to water quality are discussed in the EIR on pages 111-123.

The proposed floating docks and berth design would be enclosed on two sides by floating pontoons that would extend below the surface of the water, and the western side of the berthing facility would be fitted with a flexible skirt which would eliminate gaps between floats and would collect floatables and surface pollutants and help to prevent them from being transported to Aquatic Park. (see pages 18-19 of the EIR).

Comment

“Existing conditions/uses which have not received environmental review.

- 116 commercial and sport fishing vessels berthed in the Harbor.(*EIR page 1 and also included as part of analysis of water quality Setting and Impacts*)
- 52-54 fishing vessels which chronically or seasonally violate port tariff #4.(*transient boats identified, EIR page 1*)
- Recurring visible petroleum sheen on waters in the Harbor.(*EIR page 53,top paragraph and Impacts page 115*)

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- Seafood handling on Fish Alley.(*EIR page 37 and Impacts, page 114*)
- Seafood handling on Pier 45.(*EIR page 37and Impacts, page 114*)
- Discharge of fish waste in the Harbor.(*EIR page 52, and Impacts, page 114*)
- High concentrations of sea lions and harbor seals in the Harbor, apparently attracted by food sources generated by tenant and tourist activity in the harbor.(*EIR page 70-71*)
- Vehicle parking/traffic on Pier 45, Fish Alley and other over-water piers in the inner and outer lagoons.(*EIR pages 94-95*)
- Increased load bearing capacity of waste lines, floor drains, water lines, electrical systems sufficient to double volume of seafood handled on Pier 45 sheds B&D.(*EIR pages 75 and 126*)
- New leases on Pier 45.(*EIR page 9*)
- Uses of and drainage from Pier 45 west apron.(*stormwater runoff, EIR page 51*)
- Uses of and drainage from Pier 45 sheds B&D sanitary and floor drains(*EIR page 114*).
- Uses of and drainage from Pier 45 Valley truck and vehicle loading area.(*oil/water separator, EIR page 119*)
- Effects and contents of effluent from new outfall discharging Pier 45 valley drainage directly to the Bay.(*EIR page 119*)
- Increased parking/car/truck traffic on Pier 45. (Associated with new leases and otherwise permitted by the Port). (*EIR page 142*) “

(Margaret Reilly and Roger Beers, written comments)

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Response

Each of the bulleted comments above are followed with the reference pages in the EIR (in italics) where the information can be found. All items have been discussed in the EIR, even though many items pertain to existing conditions (Pier 45 Sheds B & D) and not to the proposed project.

Comment

“The existing facility is already a filthy operation. Just take a walk along Jefferson St. and view the oil and scum in the water surrounding the fishing fleet. Independent fisherman cannot afford adequate pollution control. Many boats in the fleet are more than fifty years old and they all leak oil.” (Robert Blum, written comments)

“I am a member of the Dolphin Club and have swam daily in Aquatic Park for nearly a decade. As is now trash, fuel and debris regularly float through Aquatic Park from the boats already in place along the Fisherman's Wharf area. To open it up to further development will certainly destroy the water quality further, likely to the point of unsuitability.” (Elizabeth A. Z. Schiff, written comments)

Response

The existing conditions for water quality are described in the EIR on pages 42-62. Improvement measures are described in the EIR for cleaning up surface oil and floatables by use of absorbent booms and absorbent pads and increased use of the work skiff to more than the existing one time a day; and increased supervision of the harbor boat activities. (see pages 117 and 168 of the EIR)

Litter and trash floating in the Harbor are discussed on page 120 of the EIR. The design of the proposed berth facility is described on page 18 of the EIR. The proposed design would provide a physical barrier between the Harbor and Aquatic Park by enclosing berth areas with encased foam pontoons that would ride slightly

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below the surface of the water and entrap floatables. No boats would be allowed on the western side of the proposed berthing facility.

The Port is also proposing to add an absorbent boom between the existing opening from the end of the Hyde Street Pier and the breakwater. The Port has proposed to increase operation of the work skiff to cleanup the Harbor daily.

Comment

"The wharf is also a tremendous recreation area. Many of the citizens of San Francisco swim at Aquatic Park, myself included. Let me assure you that when the tide turns ebb there is an unbelievable amount of garbage and foul water that currently flows out from the Pier 45 area. I have stood in the shallow water with my young son as he played at the waters edge and in one hour fished out innumerable pieces of plastic garbage, discarded plastic line, broken up wooden fish crates, pieces of pier pilings etc. When the tide turns ebb, it is easy to see the multicolored oil sheen floating past on the surface." (Robert Blum, written comments)

Response

See response above to increased daily use of the work skiff to clean up floating debris in the harbor. The proposed project includes foam pontoons on two sides of floating berths where fishing boats would be berthed, and a flexible skirt to eliminate gaps between floats, that would help to capture floatables.

Comment

"Regarding the issue of water quality, I should state that those people concerned about that, that there is no group as concerned about water quality as is the commercial fishing industry. After all, the health of our catches, the marketability of those fish, depends on good water quality. And, indeed, it was our organization that led the effort of the state legislature to ban the use of very toxic boat paint, tried to get that out of the waters. Now, as a result, there is less water

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pollution from the poisons emitted from this type of boat paint emitted from vessels. It's our belief water quality will be improved as a result of this project and The mitigation measures involved and mentioned in the EIR." (Zeke Grader, verbal comments)

Response

"Mitigation" (water quality improvement) measures referred to in this comment are described on pages 165-167 of the EIR under Best Management Practices.

Comment

Page 115 - There seems to be a great discrepancy between oil slicks observed by swimmers and rowers and amount of spills set out here. This needs greater attention. How many reports to Coast Guard by Port alerting to problems in the past year, the past 5 years? What was nature of problems? (Sue C. Hestor, written comments)

Response

The Port's Oil Spill Notification List and Emergency Notification information are attached to the EIR in Appendix B, pages A.39-40. The Port has an internal reporting procedure for oil spill response and a procedure for making the legally required notifications. By law, the Port must report all oil spills no matter how small (including mere "sheens" on the water) . The Port's Environmental Health and Safety Section coordinates oil spill response notification and clean-up activities. The Port has kept detailed records of all spills that were brought to the attention of Port staff. Over the past five years the Port has recorded nine oil spill incident's, six were in the Fisherman's Wharf Lagoon. The two incidents reported in 1996 included: a sinking fishing vessel that spilled 10-20 gallons of fuel, and a boat bilge pump spill of 1-5 gallons of bilge water. The Port used booms and absorbents to clean up the spills. Two other recorded spills were related to the fueling dock, and two were abandoned pipelines under Pier 43 1/2 and Pier 64, one was bilge pumping, one was diesel from a salmon trawler, and

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one was an unknown source. (Source of information: Roberta Jones, Memo dated August 22, 1996).

Some spills originate outside of the Harbor and the Port cannot isolate and contain these spills. Larger spills originating in the Bay, where the responsible party either cannot be found or cannot be relied upon to respond, require response from the Coast Guard's federal oil spill response contractors. In this situation, under federal and state law, the Port serves a support function as directed by the Coast Guard and the California Department of Fish and Game, but does not have primary responsibility for the clean-up.

Fuel spills from boats are discussed in the EIR on pages 115-118, and measures to mitigate spills are discussed on page 166 of the EIR.

Comment

"The DEIR and WQS identify numerous activities that potentially cause water quality impacts in the project area and in the waters of adjacent Aquatic Park .

All of these activities currently exist and occur in the Harbor, and none have received formal environmental review. The proposed project will provide facilities for these activities to continue, will result in increases in some of these activities, and will add new activities that also have potential for impacting water quality in the project area and in Aquatic Park.

Water quality in the project area is poor, violates existing legal standards, and is a contributing source of pollution to water in Aquatic Park. (See WQS p. 37). The DEIR and WQS contain and refer to water test data (the "Data") showing elevated levels of bacteria and other pollutants in the Harbor, with some levels exceeding regulatory limits and objectives.

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The pollutants found in the Harbor are the types that "may potentially originate from existing Harbor activities and proposed improvements (fishing boats, fueling; fish processing; storm runoff)." (See WQS Appendix C pp. 4-5).(Margaret Reilly and Roger Beers, written comments)

Response

The EIR discusses potential impacts to water quality on pages 111-119, including activities listed in Appendix B of the commentors written comments, such as, boat fuel spills, bilge discharge, garbage and debris thrown overboard, washdown water from boat maintenance and cleaning. Potential impacts to water quality from fish processing and handling are also discussed in the EIR (pages 114) and stormwater runoff is discussed on page 119-120. The technical backup to the EIR is the Water Quality Study, and substantial information is contained in this study to provide details on existing conditions and potential sources of existing pollutants in the harbor area.

The commentors reference to page 37 of the Water Quality Study is unclear because this page discusses fish landing data and bacteriological data. The reference to this page in the WQS may be to the historical coliform data that shows seven out of 199 sampling events exceeded the 1000 MPN/100ml threshold level for coliform in Aquatic Park (Appendix B of the Water Quality Study). The statistical analysis of this same data, however, does not show a correlation between coliform levels in Aquatic Park and coliform levels in Fisherman's Wharf Harbor. The statistical analysis showed a significant correlation with the control stations to the west of Aquatic Park but not to the fishing harbor to the east.

The May 1995 sampling of water quality at six locations in the project showed water quality conditions for all parameters within Basin Plan water quality objectives for recreational contact water except for copper (Inner Lagoon and Aquatic Park) and bacteria (Outer Lagoon and Main Basin).

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The reference to Appendix C, pages 4-5 is also unclear. These pages list the considerations used as a basis for selecting the water quality parameters established in the sampling protocol and 1995 sampling plan prepared by Woodward-Clyde Consultants. As the bullet at the top of page 5 indicates, water quality constituents were selected to capture pollutants potentially resulting from fishing boats, fueling, fish processing and storm runoff. Data from the 1995 sampling of the harbor was then used for analysis of potential impacts associated with each constituent (pages 111-119 of the EIR).

Comment

“The Data finds, but fails to identify the sources of pollutants in the project area and Aquatic Park water. That pollutants found in the project area may occur at lower levels in Aquatic Park is comforting, but not a basis to conclude that the project area is not the source of the pollutants.

Data contained in and referred to in the DEIR reflects chronic presence of contaminants in the water and sediments in the Harbor. Some of these contaminants exceed legal and administrative compliance standards and objectives (WQS p. 37), and many are contaminant types known to be associated with seafood handling and operations of a commercial fishing harbor (bacteria, organics, petroleum related hydrocarbons, metals). (DEIR S-7, pp. 111-123, Appendix B; Table 1, p. A41 and A42 and Table 15).

The DEIR fails to investigate and evaluate a number of the existing activities in the Harbor area as potential sources of contaminants.”(Margaret Reilly and Roger Beers, written comments)

Response

Sampling was conducted to assess water quality conditions both within Aquatic Park and in the Harbor and at control station west of Aquatic Park. As the statistical analysis of 199 data points of coliform sampling (over a 12 month

period) points out, the significant correlation for coliform concentrations in Aquatic Park was with the control station to the west and not with the Harbor.

Sources of contamination affecting the water quality in Aquatic Park include general Bay activities, general dredging disposal in the Bay, the historical presence of chemical-affected sediments, boat activities including fishing boats in the Harbor (and other boats outside the Harbor that effect water that is transported into the Harbor, such as the ferry service to the east of Pier 45), marine mammal populations and others. Sampling and quantification of each individual source of pollution to the Bay waters is beyond the scope of this DEIR. The 'cause' and 'effect' relationship is made between the types of pollutants associated with specific activities (boats, fish processing, stormwater runoff, etc.) and water quality parameters sampled and analyzed.

The analysis of existing and historic water quality conditions in the Hyde Street Harbor and in Aquatic Park presented in the EIR shows that conditions are within Basin Plan objectives. The protocol for sampling (sample locations, water quality parameters, tidal conditions, sampling technique and laboratory procedure) established in the Water Quality Study could serve to establish a long-term monitoring program for the project area. The Port and Environmental Quality Advisory Committee will discuss the appropriate monitoring for Fisherman's Wharf Harbor.

Page 38 of the Water Quality Study indicates that "There is no indication of a relationship between levels of coliform data in the harbor waters and fish landing data or fish processing activities. Other sources of coliform bacteria are known to be present in the project area, such as wet weather sewer overflows which contain untreated sewage diluted with rainfall and urban runoff." The statistical analysis of coliform levels in Aquatic Park showed a significant correlation with the control stations to the west of Aquatic Park.

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Comment

“On the morning of May 21, I understand that you guided a tour of the proposed development for any interested individuals. I chose to swim instead of take the tour. However on that particular morning the entire area of Aquatic Park was covered in fuel. I began swimming at about 6:30 a.m. and ended 38 minutes later due to the foulness of the fuel and oil. The tide was going out at the time so one can only surmise that the spill occurred from within the Bay probably from the area just east of Aquatic park. This type of spill is very alarming. Individuals who were on the tour reported that the spill was also visible during the tour and even though it was noted it did not seem to incite any action on the part of the officials present on the tour.

Spills of this type occur periodically and make swimming unbearable if not unhealthy (I can only speculate about the damage to the eco-system and wildlife). My concern is that with its proposed development the spills will occur more frequently and the issue of often unseen biological contaminants will increase. In the years that I have been swimming I have never known of any investigations that occur to determine the origin of these spills. It would seem that without some type of reliable monitoring and appropriate sanctions and fines there is little incentive for boats to comply with clean water guidelines and laws. I have personally observed the effects of intentional vandalism of drainpipes and again I am unaware of any consequence for by-passing the sanitation system. It is also alarming that these situation are not corrected.

I strongly believe that until the Port can demonstrate effective management in regards to water quality, it is inappropriate to consider any further development.” (Laura Burch, written comments)

“I am writing to express my concern over a recent oil spill in San Francisco Bay which seemed to come from the west side of Pier 45. On Tuesday May 21, 1996, I and many other Dolphin Club swimmers were the unfortunate recipients of that oil during our morning swim. I don’t know if you have ever had the experience of either swimming through oil or breathing in its noxious

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fumes, but I guarantee you it is not a pleasant one. And I sincerely hope that I will not have to experience it again.” (J. Marcus, written comments)

“Before proceeding with the construction of an additional 60 berths in a tidal basin directly adjacent to Aquatic Park, it would do well for the Port to develop a realistic and enforceable water quality management plan for its existing facilities. Clearly, the present situation with occasional spills and contaminations needs to be rectified before adding more potential offenders. As recently as May 21, while representatives of the Port were conducting a tour of the facilities on Pier 45, Shed B, an extensive oil slick was observed alongside the pier, spreading into the basin. The fact that every swimmer that same morning complained about the fuel presence throughout the lagoon was clear evidence that, in fact, environmental accidents in the Pier 45/Hyde Street Basin do pass into Aquatic Park on the ebb current. Perhaps most discouraging was the fact that the presence of this rather large spill did not elicit even a token of concern or action from the representatives for the Port. So much for a self-policing policy.”(David Zovickian, Written comments)

“Just yesterday, for example, I (and dozens of other swimmers) swam through a smelly, visible oil slick that was floating on the ebb tide from the fuel dock or a boat east of Hyde Street pier into Aquatic Park Cove around 8 AM. The slick fouled the water near the Thayer, at the breakwater, and at the opening between the breakwater and Muni Pier. This has happened many times.” (J. Irving, written comments)

“Thank you for arranging the May 21 walking tour of Pier 45, Fish Alley, and the fuel dock. As you recall, during our 7 am stroll along the west side of Pier 45 B Shed an extensive oil slick was observed adjacent to the Pier and spreading into the basin. It is significant that upon my return to Aquatic Park, I encountered numerous members of the Dolphin and South End Clubs who had swum that morning. Each remarked that they had encountered a widespread fuel presence in the water, not only along the beach but throughout the lagoon. In fact several members chose not to swim based on the slick visible from the docks. This incident illustrates how environmental

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"accidents" in the Pier 45/Hyde Street Basin area directly impact water quality in Aquatic Park Lagoon.

The presence and effects of pollution are all too common to the recreational users of Aquatic Park. In this latest example, the presence of fuel in the Lagoon was noted through the morning (refer to the enclosed Dolphin Club water quality log). Its presence through the Lagoon clearly demonstrates that on an outgoing ebb current, water (and the pollutants contained therein) in the Pier 45/Hyde Street Basin area passes through Aquatic Park. Neither a west wind (2-6 mph on this morning) near the presence of the historic vessels had any effect on this flow. In fact, since the construction of the Pier 45 breakwater, the ebb flow has no choice but to pass through Aquatic Park.

Water quality continues to be the primary concern of the Dolphin Club as regards Fisherman's Wharf, Pier 45, and the proposed Pier 45/Hyde Street Harbor. Incidents such as those which occurred May 21st underscore this concern and focus the need for the Port to address the issue of water quality management in their proposed uses of Fisherman's Wharf, Pier 45, and the Pier 45/Hyde Street Basin." (David Zovickian, written comments)

Response

A copy of the letter, dated June 12, 1996 from the Port Planning Director to the President of the Dolphin Club documents the incident of oil in the harbor (and in Aquatic Park) on May 21, 1996. The incident was reported to the Fishermans Wharf Manager. See also the response above (C&R page 98) describing the Port's reporting procedure for oil spill response and legal notification requirements.

The Port has an internal reporting procedure for oil spill response and makes all of the legally required notifications when the Port learns of a spill (Appendix B of the EIR). By law, the Port must report all oil spills no matter how small (including mere "sheens" on the water), and the Port has done so in every case in which it has learned of a spill. The Port also takes any necessary steps to clean up

the spill, relying on specially trained in-house personnel to respond with booms and absorbents, or, when necessary, contracting with private oil spills response coordinators for larger problems. The Port's ability to respond would increase with weekend supervision of the harbor. Of course, the Port cannot isolate and contain a spill if the spill originates outside the harbor. Large spills originating in the Bay where the responsible party either cannot be found or cannot be relied upon to respond require response from the Coast Guard's federal oil spill response contractors. In this situation, under federal and state law, the Port serves a support function as directed by the Coast Guard and the California Department of Fish and Game and does not have primary responsibility for the clean-up.

Comment

"Page 42 - Stormwater Pollution Plan - so is it being followed to the letter? If not, why not and what needs to be done?"

Page 46 - middle para - "tidal culvert" - no such labeled on Figure 3.

Page 49 - a strange map with no coding on figure. Also, please label public beach and Dolphin/rowing clubs." (Sue C. Hestor, written comments)

Response

As described on pages 119-120 of the EIR, the Port has implemented physical changes to Pier 45, as part of the FEMA post-earthquake improvements, that included the installation of a 4,000 gallon oil/water separator for stormwater runoff from the sheds roof and paved 'valley' area used by trucks. A similar oil/water separator for stormwater on the Hyde Street Pier is proposed as part of the project. See also C&R page 140, stormwater impacts.

The tidal culvert is shown on Figure 2, page 6 and on Figure 11, page 49, in the EIR.

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Figure 11 on page 49 of the EIR is from the Army Corps of Engineers study for the breakwater. It is used to show the location of the six sampling stations for water quality. The location of the Dolphin Club and South End Rowing Club are shown on Figure 2, page 6; Figure 5, page 15; Figure 6, page 16.

Comment

“My points are three, all related to water quality. First, water quality in Fisherman's Wharf is bad and doesn't have to be that bad. Here is a picture I took, and I'm circulating one set of pictures among you. This is harbor water on any day. Petroleum is a big problem. Petroleum sheen in the harbor is the norm, not the exception. When OER consultants took samples for the Water Quality Study, they saw petroleum in two of the three sampling areas. They saw it, but did not test it. Our consultant and we have suggested a form of testing appropriate to test sheen on the water, they just didn't do it. No reports to the Coast Guard or to anyone else. But we have eyes, so here's the picture. It's as good as a water quality sample. It's also proof that self-policing fails as a mitigation measure. Bacteria is another serious and chronic problem. Here is a picture I took a year ago. Tough to see, but what it is a drain under a fish alley. It's a good example of how bacteria gets in the water. That's waste spewing from pier operations into the Bay. We sent both of these pictures to the Port and OER in April, I mailed it. Last Sunday I took the kayak through the harbor to make sure what I show you today is still there. It is, a year later. The same drain in the same condition, broken, dismantled. There are three drains in similar condition within 50 yards of this one, all disconnected, all draining into the Bay. It's shameful, really. We urged in our comments on the EIR, scope of the EIR, that the following be addressed: Maintenance failure, equipment failure, intentional illegal discharge. They aren't addressed in the EIR in any meaningful way. Cumulative effects of activities in the Wharf are not adequately considered. This drain isn't fixed either, a year later. The point is responsibility, Port responsibility. Water quality in the harbor is bad, and it doesn't have to be that bad. The second point is that water in Fisherman's Wharf Harbor ebbs into Aquatic Park and it is a city beach. The Army Corp. model that I have here and I'm circulating shows you that, shows water moving out of the harbor into

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Aquatic Park right up onto the beach. We know that to be so because we smell it, we see it. It is a fact that water from Aquatic Park receives the harbor water.” (Margaret Reilly, verbal comments)

“I hope that the Port Commission took a walk down Jefferson Street a few weeks ago between Hyde and Leavenworth Streets to look at the water where the fishing boats are. That water is absolutely disgusting. Garbage, oil, scum, and that's just the pollution you can measure with your eye. I can hardly look at it without feeling ill. Every time the tide rolls out, this water and other water around the fishing boats, marine gas docks and the restaurants rolls over to Aquatic Park, San Francisco's premier swimming beach. I swim at Aquatic Park and I have personally experienced the severe drop in water quality when the tide rolls out. I make every effort to avoid this ebb tide, but my schedule does not always allow it. When I swim the ebb tide, I literally hold my breath, not knowing what garbage, what oil, what smells, what tastes the brown water brings. It's gross. It's at these times that I think about the creatures who don't have that luxury of getting out of the water when it smells and feels so bad; the seals, the sea lions, the grebes, the double-crested Cormorants and, yes, even the fish that are still left, the animals who must filter this water through their systems, animals who can't come down to the Planning Commission and beg them not to pollute their environment in one more way that could one day spell the end of their residence here in the Bay. The heavy metals from the refineries, the dredging material that is dumped near Alcatraz, and, yes, even 115 more commercial fishing boats and the residue of leaky gas tanks and bilges, it all adds up.

The water quality at Aquatic Park and the north waterfront is not good now, and I do not see how it will get better by expanding these facilities. Please reconsider investing the City's money in this facility and implement programs that will improve the water quality and bring those salmon back to San Francisco Bay from Half Moon Bay.” (Megan Sullivan, verbal comments)

“No attempt was made to quantify the existing sources of pollution.” (Margaret Reilly and Roger Beers, written comments)

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b. Water Quality-Conditions

Response

See previous information regarding microlayer sampling, C&R page 86. The comments about unconnected drains along Fish Alley are noted and this information is added to the Water Quality Setting Section under existing conditions for cumulative impact analysis. The following is added to the second paragraph, third sentence, on page 51 of the EIR:

(including runoff from aprons along Fish Alley where drains discharge directly to the Bay)

The water quality impact assessment does include stormwater runoff and waste from fish processing activities (pages 114 and 119 of the EIR), however, the focus of the analysis is on Pier 45 because that is the area proposed for change. No changes are proposed for facilities along Fish Alley.

The Port has established an Environmental Quality Advisory Committee for the Harbor and the Committee is in the process of identifying specific actions that can be taken to improve existing conditions. Connecting the drains along Fish Alley to the oil/water separator proposed for the Hyde Street Pier could be considered as part of the improvements.

Maintenance and equipment failure and illegal discharge of fish waste into the Harbor water is addressed in the EIR on page 115, under Fuel Spills and Other Activities From Boating.

The transport of pollutants from the Harbor to Aquatic Park is addressed in C&R pages 55 to 57.

The comments relate to the existing conditions in the project area that are described in the Environmental Setting Section of the EIR, Section B. Water Quality. The proposed project would include actions to improve the existing conditions, such as: the addition of a pumpout facility for boats adjacent to the

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fueling facility; installation of an underground pipeline to connect the fueling facility with tanks along Jefferson Street (thus removing the fuel truck currently parked on the pier); adding restrooms for commercial fishermen; adding floating berths surrounded on two sides to collect floatables; increasing Harbor supervision to seven days a week, increasing the work skiff operation; providing a berthing design that would include a skirt that goes beneath the surface of the water and encloses the boats on two sides to catch floatables and help to prevent surface pollutants from being transported to Aquatic Park.

Sampling was conducted to assess water quality conditions. Sources of contributions to the water quality include general Bay activities, general dredging disposal in the Bay, the historical presence of chemical-affected sediments, fishing boat activities, marine mammal populations and others. Each of the potential sources of pollutants in the Harbor are discussed on pages 111-121 in the EIR. Since they all could contribute to the existing conditions in the Harbor, the cumulative effects are considered by sampling the receiving water (four of the sampling locations within the Harbor). Water quality parameters quantitatively measured in the laboratory samples are associated with potential pollutants from activities in the Harbor. Quantification of each of the individual sources of pollution to the Bay is beyond the scope of this EIR.

Comment

“Concerning water quality and the increased number of berths. Currently, the Harbor lacks proper facilities and oversight. This is evidenced by numerous complaints from nearby swimmers at Aquatic Park concerning water quality.” (Christopher Martin, written comments)

Response

The proposed project would both increase Harbor facilities (add a pumpout, add restrooms for fishermen, add an oil-water separator on the Hyde Street Pier, add a

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3. Environmental Setting

b. Water Quality-Conditions

oil-waste facility, add a fuel delivery line to an off-site fuel tank) and would increase Harbor supervision from five days a week to seven days a week.

Comment

“SERC’s concern regarding need for the Port to monitor and address on-going existing pollution in Aquatic Cove and the Inner and Outer Harbors for boats, fuel facilities, industrial and fishing uses whether or not the Port Project goes forward.” (South End Rowing Club, written comments)

Response

The Port has established a Fishermans Wharf Environmental Quality Advisory Committee to provide input on the monitoring and Best Management Practices aimed at improving the management conditions and water quality in the harbor. The Committee will also provide input into the type of ongoing monitoring necessary for long-term analysis of water quality trends in Aquatic Park and the harbor areas and to identify potential ‘cause/effect relationships’ between activities in the Harbor (or other parts of the Bay) and water quality in Aquatic Park.

The Port is currently investigating the possibility of conducting a cooperative long-term monitoring effort with the City (Bureau of Water Pollution Control) and with the San Francisco Estuary Regional Monitoring Program (mussel watch) to evaluate the concentrations of bacteria and trace substances in the vicinity of the Harbor over a longer period of time (one to two years). The objective of such a long-term monitoring program would be to provide a database to identify trends in data, similar to the analysis of trends shown in the 1991-1992 coliform data. A long-term database would facilitate comparison of Harbor water quality conditions with other parts of the Bay and with conditions in Fisherman’s Wharf such as, seasonal variations, rainfall, volume of fish landed on Pier 45, tidal

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conditions, and number of boats in the Harbor. Long-term data would also facilitate statistical analysis of samples with correlated conditions in the Harbor. The need for a long-term monitoring program is not described in the EIR as part of mitigation for the proposed Hyde Street Fishing Harbor because no significant impacts were identified. Monitoring programs will be discussed as part of the Fisherman's Wharf Environmental Quality Advisory Committee.

Risk Assessment

Comment

“The Purported Risk Assessment is meaningless. Because there is no projection made of the pollutants that will be generated by the project in Aquatic Park, there is no risk assessment presented for this purpose.

The single sampling event in 1995 cannot suffice, and apparently the risk assessment inexplicably failed even to consider the one other sampling that has been done for chemical contamination these waters - the Bendix study in 1989. Although that study was flawed in many respects, it did show detection of a number of chemicals that were not found in the single sampling event in 1995 (some of which were not even tested for in 1995), including mercury, silver, antimony, barium, thallium, vanadium, two organophosphorous compounds, and phthalates. Mercury has been determined to be a carcinogen by the State of California.”
(Margaret Reilly and Roger Beers, written comments)

Response

As noted on page 15 of the Water Quality Study, “the purpose of the water sampling was to: (1) assess water quality in the project area for constituents which may be affected by the proposed project and are of potential concern to those involved in water contact recreation, particularly Aquatic Park; (2) assess water quality in Aquatic Park for constituents which may be affected by the proposed Hyde Street Harbor and Pier 45 improvements; and (3) assess water quality outside of the area of immediate concern for comparison with the project area and the Aquatic Park.” As noted on Figure 4 on page 17 of the Water Quality Study, samples were collected from six different locations including the Inner Lagoon, Outer Lagoon and Main Basin. The sampling event was designed to characterize water quality conditions that favor transport of water from the Harbor to Aquatic Park during the period of ebbing flow when water current velocities were low

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b. Water Quality-Risk Assessment

(worst case conditions in Aquatic Park). Detailed statistical evaluations of data would require significantly greater numbers of samples, which were not feasible for this study.

Analyses performed for the 1995 Water Quality Study included those chemicals identified in the S.F. Bay Basin Plan, as well as those chemicals most closely associated with the proposed project activities. Mercury, silver and organophosphorous pesticides were included in the 1995 sampling. Mercury and silver and organophosphorous pesticides were below the detection limit for all six sampling stations.

Although phthalates were detected at trace levels in the Bendix study, phthalates are common laboratory contaminants (from plasticware and gloves used in a typical analytical laboratory) and are subject to false positives. Data from the Bendix study for thallium, antimony barium, and vanadium were at or below the laboratory reporting limits and are not considered a reliable indicator of the presence of these metals.

Comment

“The risk assessment also mistakenly failed to apply the California standards for determining what is carcinogenic. Thus, nickel has been determined by the State of California to be a carcinogen, but this fact is not recognized in the DEIR, and it is not analyzed as a carcinogen in the risk assessment. There is also no mention of the fact that toluene, also detected in the sampling, has been determined by the State to be a reproductive toxin.” (Margaret Reilly and Roger Beers, written comments)

Response

Nickel subsulfide and nickel refinery dust are considered to be carcinogens by the State of California (22 CCR 12705). Nickel subsulfide is a major component of

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nickel refinery flue dust. Because nickel found in water quality samples collected in 1995 is not likely to be from a nickel refinery, nickel was not evaluated as a carcinogen in Appendix E of the Water Quality Study. Nickel was evaluated as a noncarcinogen for potential health hazards (Table D-8 and Table D-9 of Appendix E of the Water Quality Study). As shown on Table 1 on Appendix E, the maximum project area concentration (ug/l) for nickel was 2.6 for the samples taken for the EIR. The Drinking Water Standard is 100 ug/l for nickel for a 24 hour average. Comparisons of the single sample event with a 24-hour average are therefore not definitive for meeting regulatory requirements.

Although the identification of tolerance as a reproductive toxin by the State of California (22 CCR 12805) was not noted in Appendix E, tolerance was evaluated as a noncarcinogen for potential health hazards (page 10 of Appendix E of the Water Quality Study). The concentration of tolerance detected in the project area is approximately one thousand times less than the drinking water standard (1000 ug/l). The consideration of nickel subsulfide and nickel refinery dust as carcinogens and toluene as a reproductive toxin are part of the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). The State of California's carcinogenic designations under Proposition 65 were considered in the development of the evaluation presented in Appendix E of the Water Quality Study, but the evaluation was not a Proposition 65 evaluation.

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c. Marine Biology-Brown Pelican and Cormorant

c. Marine Biology

Brown Pelican and Cormorant

Comment

“Finally, in Section IV-C, Marine Biology, page 71, regarding the California brown pelican, a federal and state-listed endangered species, you state that “none have been recorded in the project area.” This is not true.

Brown pelicans regularly roost on the rockfill and pilings in the project area just east of Hyde Street Pier and north of the fuel dock. I filmed brown pelicans in breeding plumage roosting in the project area on January 6, 1996 and would like to request a time slot for an IDG representative to show several minutes of footage at the public hearing on June 6th. After the public hearing I will provide a VHS copy of this footage to the Planning Department.” (J. Irving, written comments)

“Relative to biology, and this is extremely important, the Draft Environmental Impact Report fails to identify the presence and the impact to endangered species and species of special concern in the project area. The DEIR is wrong in stating with regard to the state and federally listed California brown pelican (*Pelecanus occidentalis californicus*) that none have been recorded in the project area. The California brown pelican does occur within the project area. This documented fact is not correctly reflected in the DEIR. The assertion is not supported by the facts. OER will receive letters from Audubon Society concerning that fact. The double-crested Cormorant also occurs within the project area, and there are no mitigation measures with regard to any of these because these are omitted from the document.” (Aaron Peskin, verbal comments)

“The fact that the DEIR fails to note the presence of this endangered species is a "significant effect" under CEQA and constitutes "significant new information" (§15087, CEQA Guidelines) and subject to additional public review and comment.” (David Behar, written comments)

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c. Marine Biology-Brown Pelican and Cormorant

“In addition, the DEIR fails to note the documented presence of the double-crested cormorant (*Phalacrocorax auritus*) a California Department of Fish and Game Species of Special Concern, which regularly roosts on the breakwater at the northern boundary of the Project area. This has been confirmed by the Audubon Society (letter to Sharon Rogers dated May 23, 1996).” (Laura Taylor, written comments)

Response

In response to the four comments above, regarding the observed presence of the brown pelican and the double-crested cormorant in the project area: the Draft EIR reported both of these species as characteristic of open water habitats in the San Francisco Bay (page 68 of the EIR). The EIR states that “Although the California brown pelican does not nest in the area, San Francisco Bay is used by this species for foraging and roosting.”

The following text is added to the EIR, page 71:

Under the Double-crested Cormorant, a sentence is added at the end of the paragraph.

The California Department of Fish & Game recognizes several healthy colonies of Cormorants in the Bay Area. The species typically perches on man-made structures that are inaccessible to humans, such as bridges and transmission line towers. Cormorants have been observed perching (resting) on the breakwater in the project area.

Under the California Brown Pelican, the DEIR text “None have been recorded in the project area.” Is replaced with:

The California Brown pelican breeds in nesting colonies on islands from the Channel Islands off the coast of Southern California southward to Mexico. Breeding typically occurs between December and July. Nesting colonies are extremely sensitive to human disturbance. An unattended egg is vulnerable to heat stress and can die within 30 minutes if the adult is flushed from the nest by the presence of humans or their pets.

During the non-breeding periods, individuals and groups of pelicans disperse along the west coast from British Columbia, Canada to Central America. Non-breeding pelicans may

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c. Marine Biology-Brown Pelican and Cormorant

congregate in groups at specific locations called roosting sites. Pelican roosting sites have been identified in several locations in the San Francisco Bay and are typically located on islands or breakwater structures which are not accessible to humans. An individual pelican is likely to perch on pilings, piers or floating structures. This perching activity by an individual or small group of pelicans is not considered roosting. (source: Wilcox, Carl, Environmental Services Supervisor, California Department of Fish & Game, Region III, personal communication with Patricia Mosley, Biologist, Woodward-Clyde Consultants, July 5, 1996.) California brown pelicans have been observed perching on pilings adjacent to the existing fueling station in the Main Basin of the Hyde Street Harbor and this activity has been recorded on video film dated January 6, 1996 (Judy Irving and Christopher Beaver).

The above clarification of information in the circulated EIR does not represent new information that would require recirculation of the EIR. The Draft EIR was circulated to US Fish and Wildlife Service and California Department of Fish and Game (see distribution list page 189) for review and comment.

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3. Environmental Setting

c. Marine Biology-Sea Lion

Sea Lion

Comment

“A swimmer was attacked by a sick seal lion resulting in injuries requiring many stitches. Sea lions and harbor seals create excrement which, in concentration would increase bacteria in the Harbor area (pp. 71, 124). Yet the project's potential to draw more of these populations to the Project area is not analyzed sufficiently in the DEIR.” (Margaret Reilly and Roger Beers, written comments)

Response

Discussions with Dr. Laurie Gage, DVM of Marine World USA, in response to this concern, revealed that sea lions would shy away from active boat use in the harbor and would continue to be attracted to the haul out area at Pier 39 where they are undisturbed. In addition, the increased supervision of the harbor area by Port personnel would help prevent the illegal feeding of sea lions in the harbor.

d. Hazards

Comment

“Page 103, Figure 16- Bell Smoked Fish- a label, but what is the boundary of the building?”

(Sue C. Hestor, written comments)

Response

Figure 16 is revised to include an insert showing the property boundary of the Bell Smoked Fish Building.

4. ENVIRONMENTAL IMPACTS

a. Land Use / Visual

Comment

“Furthermore, the document does not appear to include a discussion as to whether the proposed project is consistent with the various Commissions laws and policies which apply to the Bay, the shoreline and the San Francisco Waterfront. On page 30, the DEIR states that the proposed uses for Pier 45 may not be consistent with BCDC Special Area Plan policies for the waterfront if the public access does not meet the Commission's policies or if the uses over new pilings are determined to be non-water-oriented. The Final EIR should expand its discussion in Section IV-A. (page 110) and briefly summarize whether the proposed project would be consistent with the McAteer-Petris Act, the *San Francisco Bay Plans*, and the *San Francisco Waterfront Special Area Plan*. While the proposed project does not, at this time, appear to raise significant conflicts with the Commission's laws and policies, major issues the Commission would need to consider in reviewing the proposal are as follows. First, more detail would ultimately be needed on the types of uses to be proposed on "new" Bay fill to ensure that they are water-oriented, or that they would qualify as a minor fill to improve public access or shoreline appearance, and that the proposed fill would meet all the criteria spelled out in Section 6605 of the McAteer-Petris Act and the policies in the *San Francisco Bay Plan*. In addition, depending upon the amounts of solid fill proposed and its potential impacts, mitigation to offset the loss of Bay surface area and volume may be required. Second, the proposed project and its public access component would likely be brought before the Commission's Design Review Board for a recommendation as to whether the proposed public access would be appropriate in light of the applicable policies. Lastly, while the DEIR appears to contain extensive analysis on water quality and potential impacts from the proposed project, we urge you to continue exploring ways of improving water quality in the vicinity for this area supports many highly visible beneficial uses of the Bay, as identified in the Regional Water Quality Control Board's Basin Plan. The Commission relies in

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a. Land Use / Visual

large part on the advice, policies and recommendations of the Regional board to carry to its water quality responsibilities.” (Nicholas Salcedo, BCDC written comments)

Response

The DEIR (pages 27-30) acknowledges that there may be issues of compliance with BCDC regulations, depending upon the final project for the Sheds A and C. It is further stated that BCDC permitting would be required for this project, and at the time that the application is made detailed analysis of compliance with the BCDC plans would occur. The issues around improving water quality are addressed in the C&R pages 170, 183, and are the subject of ongoing scrutiny by the Fishermans Wharf Environmental Quality Advisory Committee.

Comment

“The DEIR should discuss whether the portion of the proposed project which would occur within the park priority use area are consistent with the park priority use designation, and whether the proposed facilities would be consistent with the Commission's Bay Plan policies on recreation.

The San Francisco Waterfront Special Area Plan provides that at Pier 45, public access, boat slips and maritime activities are permissible uses on new or replacement fill. The plan also includes a footnote which states that:

The provisions of the Special Area Plan relative to Pier 45 are based on the assumption that new uses on the pier can be accommodated without structural improvements to those portions of the pier on pilings over the water. If reuse, in fact, required new pilings to be driven in the water, uses over the pilings would have to be water-oriented. In this case, the Special Area Plan policies, recommendations and map provisions for Pier 45 will become inapplicable and new policies recommendations and map provisions would have to be adopted as an amended to the Special Area Plan.

The DEIR should discuss whether the project would be consistent with the requirements of the Special Area Plan.” (Joseph LaClair, written comments)

Response

Depending upon which of the combinations of uses is finally proposed to be carried out by the Port for Pier 45, consistency with the Special Area Plan would have to be determined by BCDC at the time that a permit application is filed with them.

Comment

“The DEIR fails to adequately consider changes in land use resulting from converting Pier 45 Sheds A & C from their historical fishing-related uses to a shopping center for tourists. The DEIR's statement that the proposed uses for Shed A & C do not "substantially change the character of the vicinity" (pages S-7, see also page 110) is incorrect and is contradicted by other information in the DEIR. The fact that the ". . . project would . . . require conditional use authorization if non-maritime related uses (meeting facilities, retail, food service) are included" as well as an amendment to the Northeastern Waterfront Area Plan of the City's Master Plan, Proposition H review and special Planning Commission review (DEIR, page 39) are clear indications that the proposed Project for Pier 45 represents a significant land use change. The environmental impacts of this significant change in land use have not been adequately addressed in the DEIR as required by CEQA.” (Laura Taylor, written comments)

Response

The uses that are the preferred alternative (submitted by the Port in a letter dated June 5, 1996) for Pier 45- Sheds A and C now would include some fish processing and ancillary activities such as gear storage.

The proposed Waterfront Land Use Plan, however, is seeking to broaden the uses that would be allowed and would include the following: “give priority to fishing

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4. Environmental Impacts

a. Land Use / Visual

industry uses in Sheds B and D of Pier 45, and to permit maritime offices; retail, research, educational assembly and entertainment and institutional uses; parking; and visitor centers compatible with the fishing industry in Sheds A and C.”(Reference: Proposed Waterfront Land Use Plan EIR, p. 369)

Comment

“There is no reason this beach should be impinged upon or obliterated, and I would ask that the final EIR look at that and see to it that our use of the area, which is on par with the swim clubs, be considered.” (Sharon Alexander, verbal comments)

Response

As discussed on p. 14 of the EIR, the proposed harbor plans include relocating the existing rock fill and replacement of the existing timber pier structure with concrete piles over the existing beach area. The Port does not anticipate any beach area remaining for use by recreational canoeists between the Harbor and the Hyde Street Pier. Existing recreational use of the beach is occurring without knowledge or approval from the Port Commission.

Comment

“Finally, the EIR on this project should be deferred until the Port's Waterfront Land Use Plan and final Master EIR are completed and brought to you for review. We have extensive additional comments and will submit them.” (Aaron Peskin, verbal comments)

“This project, as well as the other existing and prospective land uses in the Fisherman's Wharf area, are the subject of the broader Draft Waterfront Land Use Plan (the "Waterfront Plan") mandated by Proposition H. The Waterfront Plan will establish definitions for water dependent and maritime uses and will identify acceptable uses for the waterfront including the project area.” (Margaret Reilly and Roger Beers, written comments)

Summary of Comments and Responses

C. Comment and Responses

4. Environmental Impacts

a. Land Use / Visual

Response

This project, in its various iterations predates, and informed the relevant sections in the proposed Waterfront Land Use Plan and Draft EIR. There are no inconsistencies between this proposed project and DEIR and the proposed Waterfront Land Use Plan and its DEIR.

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4. Environmental Impacts
b. Water Quality Impacts - General

b. Water Quality Impacts

General Water Quality

Comment

“Project components which constitute change or increase. Hyde St. Fishing Harbor Berths and Associated Service Facilities:

1. 40 additional berths and 20 additional side/stern tie spaces off Hyde Street Pier which:
 - a. increase spaces available for lease for commercial and sport fishing boats and other vessels from 116 to 176.

Note: 116 vessels pay rent on berths or space. 12-14 more chronically tie up in the harbor (apparently non-paying). On a seasonal basis, there may be up to 50 “transient” vessels in the Harbor. It is only occasionally (at the height of the herring season) that there may be up to 170 vessels in the harbor at any one time. (S-1 figure 1s. p. 1; p. 1; WQS p. 4)

- b. Place 60 boats in a new location (and in a tidal area); (S-1, S-4, p. 16 Tables 3, 14; WQS p. 4.
 - c. Provide attractive sea lion and harbor seal haul out areas (pp. 71, 125; WQS Appendix F p. 5 and Appendix G p. 7)
2. Bay fill/coverage of 22,723 sq. ft., including 715 cu yds of fill within the shoreline band. (S-4, 14, 16 Figure 6, 17 Table 3)
3. Relocation of rock fill. (S-4, 14, 16 Figure 3, 17 Table 3)
4. 21 vehicle parking space (5 currently exist): On Hyde St. Pier and relocated fill. (S-5, 16 Figure 6, 20)

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4. Environmental Impacts

b. Water Quality Impacts - General

5. Bay discharge outfall: Location unknown. To discharge runoff from the work dock, gas dock and the vehicle parking area on Pier. (S-4, 16 figure 6, 20).
 6. A work dock: foot of Hyde Street Pier. (S-4, 16 Figure 6, 20)
 7. 3,000 sq. ft. of public access: Foot of Hyde St. Pier. S-4, 16 Figure 6, 20)
 8. 200 sq. ft. restroom: At fuel dock. (S-4, 16 Figure 6, 20)
 9. Vessel sewage pump out station at gas dock. (S-5, 16 Figure 6, 20)
 10. Replacement fuel pipeline from fuel tanks on Jefferson Street to fuel dock at foot of Hyde. (S-4, pp.16 figure 6, 20, 108, 157 Item 12)
 11. A locked gate barring public access to the new dock (the work dock) and new berths (Location not shown on Figure 6, 20)
 12. 24 vehicle parking spaces: At Bell Fish building (to be demolished). (S-4, 16, Figure 6, 21).
 13. Dredging 20,000 cubic yards of bottom sediments. (p. 124. Appendix B)
- Pier 45 sheds A & C and East Apron (145,000-190,000 sq. ft.: (S-1; WQS p. 5)
14. Fisheries Center (in sheds A & C) S-1

*Visitors Center 25,000 sq. ft.

*Conference Center - 20,000 sq. ft. (Alternatives are Ed Center and no conference center or conference center and no visitor center)

*Retail space - 40,000 sq. ft.

*Office space - 10,000 sq. ft.

*Parking (for above uses) - 50,000 sq. ft. . “

Summary of Comments and Responses
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b. Water Quality Impacts - General

(Margaret Reilly and Roger Beers, written comments)

Response

The listed items do constitute project components that would be different from the existing situation. However, the changes referred to have not been found to be of such magnitude that “significant impacts” would result.

In response to the numbered items listed in Appendix ‘C’ of the commenters written comments, several of the physical changes are incompletely or incorrectly described :

1. The EIR identifies the existing use of the Harbor as 116 lease spaces, plus about 14 rafted boats, plus up to fifty seasonal boats, for a total of 180 boats. This estimate does not include boats that use the Harbor to unload fish at the apron of the Sheds B and D, and then leave the Harbor. The Harbor has been used historically by commercial fishing boats. The proposed use does not represent a change to the existing use of the Harbor. Also, the boats in the Harbor use the Main Basin (the location proposed for the new berthing system) to access the fueling facility and the Outer Lagoon. With reference to the sea lions, the EIR points out on page 125 that “docks occupied by boats, with human activity, would not be likely to attract sea lion use”, unlike the vacated docks at Pier 39 used by sea lions.

2. Table 3, page 17 presents a description of the Bay and Shoreline Band Fill (by BCDC criteria) for the proposed project. Table 16, page 179 shows the comparison of fill and cover for the proposed 60 berth project and the originally proposed 88 berth Harbor facility.

3. Existing rock fill would be relocated, the reconfiguration of the rock fill would fill the existing gap between the Harbor and Hyde Street Pier.

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b. Water Quality Impacts - General

4. The parking on Hyde Street Pier fill is discussed in the EIR, page 21.
5. The project does not include a discharge outfall. An oil/water separator is proposed (similar to the existing oil/water separator in the 'valley' of Pier 45) for the paved area adjacent to the fuel dock.
6. The EIR description of the work dock area has been augmented to add: "The work dock area would include space for public access, a hoist and net roller. The 30' x 50' area would be used to transfer supplies from boats, layout and repair fish nets and fishing gear."(page 20 of EIR, last bullet)
7. The 3,000 square feet of public access is described on page 21 of the EIR, not page 20.
8. The 200 square foot restroom for fishermen is proposed near the fueling area.
9. The vessel pump-out would be 20 gallons per minute capacity and would be connected to the City's sanitary sewer system.
10. The proposed fuel delivery pipeline (140 feet long) would include automatic shut off features, a leak detection system, remote operated shutoff switch and pressure sensitive valves.
11. The location of the security gate at the shore end of the berthing pier has been added to Figure 6, page 16. It is described on page 18, not page 20 of the EIR.
12. The reference to the 24-space parking is correct.
13. In addition to the discussion of dredging referenced in the commenter letter for page 124 in the EIR, dredging is also discussed on page 121 of the Water Quality Section, under Construction Impacts. Permit conditions for dredging are included in the discussion and short-term, localized effects to the Bay water quality are discussed.

Summary of Comments and Responses
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b. Water Quality Impacts - General

14. The Fisheries Center description in the EIR is on page 21-23, Project Description. A brief reference to the use of Sheds A & C is on page S-1. Please note that the proposed use has been modified by the Port, as described under Section D, Staff Initiated, page 130, and as shown in the revised text of the EIR.

Comment

“Activities identified as potentially causing water quality impacts to the project area and adjacent Aquatic Park. (See: DEIR p. 111; WQS p 34).

- Fish handling/processing: improper waste disposal
- Pier washdown
- Pier storm runoff
- Vessel presence and operations: bilge discharge, fueling activities, equipment failure, maintenance activities (e.g., lead paint), fuel spillage, fuel leakage.
- Intentional vessel discharges: human waste, fish waste, washdown (detergents, bacteria and other chemicals), jettison of other wastes.
- Berth and vessel runoff
- Litter and trash in the project area
- Dredging
- Bay fill
- Construction related activities. “

(Margaret Reilly and Roger Beers, written comments)

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4. Environmental Impacts
b. Water Quality Impacts - General

Response

As the commenter correctly points out, each of the bulleted items above are addressed in the water quality impact discussion starting on page 111 of the EIR.

The outcome of the examination of the possible effects from each of these cited activities is that there would not be significant water quality impacts from the levels of activity anticipated.

Comment

“Also, there is a conclusion that if this project went forward, it will not negatively affect the water quality in the area, but I'm concerned about whether the project can actually improve the quality of the water in the area by perhaps some design. And, also, is there a way to address the water quality within the inner room (lagoon). I notice that's a problem. And perhaps is there a way to divert the flow of the water away from Aquatic Park so it goes out more to the Bay? And negative impacts that are perceived by the recreational users of the area need to be addressed. But I would like to have those comments addressed, please.” (Hector J. Chinchilla, verbal comments)

Response

A number of the water quality issues relate to past and present conditions in the harbor. The proposed project would provide substantial improvements to the existing conditions. For example, the proposed improvements to the existing fueling facility (that is located closest to Aquatic Park) would connect the fueling dock with off-site fuel tanks (located along Jefferson Street) by adding an underground pipeline along the alleyway. The proposed improvements to the Hyde Street Pier also include a vessel pumpout and a restroom for boat operators and fishermen, thus minimizing the illegal disposal of human waste into the Bay. An oil-water separator is also proposed for the paved area of the Hyde Street Pier,

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improving the existing condition where stormwater from an area routinely used by vehicles now washes into the Bay. Finally, the proposed berthing design for the commercial fishing boats is a design that includes a flexible skirt on three sides of each berth that would serve to capture 'floatable' debris and help to keep it in the harbor where it would be picked up each day by the work skiff. These, and other measures to improve the existing conditions in the harbor, are discussed starting on page 167 of the EIR. In addition, the recently created Fishermans Wharf Environmental Quality Advisory Committee is working with the Port, the National Park Service, San Francisco Recreation and Park Department and Bureau of Water Pollution Control to identify ways to improve existing conditions and monitor the effectiveness of the improvements.

In response to the question about trying to divert the water flow away from Aquatic Park, two features of the proposed Harbor design may, in part, effect the direct flow of water to Aquatic Park under the Hyde Street Pier. The first design feature is the flexible skirt on the floating docks that would help to prevent 'floatables' from moving outside of the Harbor. The second feature is the reconfiguration of the rockfill (shown on Figure 6, page 16 of the EIR) that would help to block water from the Outer Lagoon flowing into Aquatic Park.

Comment

"As users of the Aquatic Park, the specific issue that we address concerns the adequacy of the DEIR for the Hyde Street Fishing Harbor/Pier 45 Sheds A and C project. After careful review, we have concluded that the DEIR is grossly deficient in many respects and is not a document that we can support. It glosses over issues relating to water quality, which is the utmost important to the South End, does not review other possible alternatives and deals inadequately with other impacts." (Laura Taylor, written comments)

Response

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Water quality is the topic of a majority of the discussion in the Setting, Impact and Mitigation sections of the EIR, providing substantial information on the physical conditions, regulatory framework and water quality sampling data, and factors in the Harbor that affect water quality. The EIR is backed up with a separate Water Quality Study and eight appendices containing detailed information on water quality. No significant water quality impacts associated with implementation of the proposed project were identified in the EIR that warranted further studies, which is the same conclusion reached in 1990 by another technical team (Bendix Environmental Research, Inc) analyzing the impacts of a larger project.

In response to the comment about alternatives, the EIR includes one alternative for the Harbor and two alternatives for Pier 45 and provides information to describe the differences between the alternatives and the proposed project and no project (Section VII, pages 175-188). The Harbor alternative is the original 86 berth design, plus 10 side tie spaces and 10 stern tie spaces for commercial fishing boats, and a new Harbormaster Building on a new fuel dock. This larger project was originally proposed as the preferred project by the Port (see Appendix A- Initial Study) and is included in the EIR for informational purposes. Because no significant environmental impacts are identified for the proposed 60-berth Harbor and Pier 45 uses, no other alternatives are required. CEQA (Section 15126(d)) describes the purpose of alternatives to the Proposed Action as: "Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly."

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Comment

“Water quality will be significantly impacted by the Project. CEQA provides that a project will have a significant effect on the environment if it will “[s]ubstantially degrade water quality...” (CEQA Guidelines, Appendix G (f)) or “[c]onflict with established recreational...uses of the area...” (CEQA Guidelines, Appendix G (w)). CEQA further requires that the DEIR clearly identify and focus on any “health and safety problems” which could be caused by a project (CEQA Guidelines, §15126(a)).

The DEIR’s statement that “no significant impacts are identified for water quality...these areas do not require mitigation...” (DEIR page 165, see also pages S-13 and 111) is not supported by the facts. Numerous activities associated with the Project are identified in the DEIR that could cause water quality impacts in the Project area and in Aquatic Park including fish handling and processing activities, fuel spillage and leaks (including bilge water) from vessels, fueling activities, equipment failure, maintenance activities, pier and boat deck runoff and washdown discharge directly into the Bay, trash and litter generated by harbor users and visitors, effect of dredging, filling and other construction activities including placement of fill and rock materials, removal of existing piles, and installation of concrete piles. (DEIR, page S-7, 111). Also of concern to swimmers are the water quality impacts associated with the proposed work dock which impacts are not even mentioned in the DEIR (see Part III.B, above).” (Laura Taylor, written comments)

Response

The 1996 Resources Agency proposed revisions to CEQA Guidelines for Determining Significant Effects (Section 15064 (c)) reflect that “lead agencies are not required to consider an effect to be adverse based on opinion not supported by facts”. The proposed revisions for subsection (e) “requires lead agencies to use previously reviewed regulatory standards as a threshold for determining significant effect on the environment. These standards already reflect a well-

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considered determination of what is appropriate to require for resource protection.”

The commenter does not provide any facts to support a determination that water quality would be significantly impacted by the project. The EIR does provide data (facts) to show that Basin Plan Water Quality Objectives and EPA Water Quality Standards are not exceeded under existing conditions, and that the use of the Harbor will not substantially change from the uses that have been in the Harbor for decades. Thus, water quality would not substantially change (and should improve with the proposed pump-out facility, skirted berths for boats, an oil-water separator on Hyde Street Pier, expanded supervision of the Harbor, and a restroom for boat operators) from existing conditions.

A Public Health Evaluation of Water Quality was conducted by SOMA Corporation (Appendix E of the Water Quality Study) that evaluated the risks associated with swimming activities in the Bay waters of Aquatic Park based on potential incidental ingestion of water during swimming and dermal absorption routes of exposure. This analysis is summarized on pages 54-56 of the EIR. The calculated risk associated with swimming in Aquatic Park is lower than the “significant risk level” established by the Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop 65) which is one excess case of cancer in an exposed population of 100,000 persons.

The 30' x 90' work dock area would be for transferring supplies to boats, laying out and repairing fishing nets and fishing gear. The space would also serve as public access to the pier and would be under the supervision of the Harbormaster. No water quality impacts would result from the proposed activities in the work dock area; nor would there be any danger to swimmers in that it would be located on Port property on the east side of Hyde Street Pier, on the opposite side from where the swimmers enter and exit the water.

Fish Processing

Comment

“Second, even the analysis of the fish landings is limited to a survey of the trend in fish landings at other ports. The inference that is drawn from this survey is that “since other ports in the area also experienced a similar decrease in fish landings, the decrease in fish landing poundage received at the Hyde Street Harbor/Pier 45 was apparently due to factors in addition to earthquake-related relocations” and that the completion of these “would not be expected to be sufficient incentive for fish landings to return to pre-earthquake levels.” DEIR at 113. However, this is largely speculative, since the data does not allow any conclusion as to whether declines at other ports would have been larger without relocation of the industry from Fisherman’s Wharf, and whether there will be a return of at least part of this industry with the upgrade of facilities in the Project.” (Margaret Reilly and Roger Beers, written comments)

Response

The EIR presents fish landing data to show the general decrease in fish landings in the Bay area, unrelated to Pier 45, to make the point that it is unlikely that the future fish landing volumes at Hyde Street Harbor/Pier 45 would return to the 1988 levels that preceded the earthquake repairs, even with the proposed improvements. The EIR, page 113, does however point out that “improved berthing for commercial fishing vessels and improvements to harbor facilities would likely encourage the return of some of the fish handling activities to the Fisherman’s Wharf area”. The EIR goes on (page 114, second paragraph) to describe that “there is no indication of a relationship between levels of coliform data in the harbor waters and fish landing data or fish processing activities. Other sources of coliform bacteria are known to be present in the project area, such as wet weather sewer overflows which contain untreated sewage diluted with rainfall and urban runoff.”

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Bacteria/Coliform

Comment

“Attempted correlations in the DEIR between fish landings and bacterial count are also meaningless since fish landings account for only a small percentage of the seafood actually handled and processed in the project area. (The Port does not keep records on the volume of seafood trucked in, but should be required to). Moreover, “landing” fish is only one of the many other potentially bacteria producing activities occurring in the project area.” (Margaret Reilly and Roger Beers, written comments)

Response

The EIR does not attempt to correlate fish landings with bacterial counts but does present a statistical analysis of coliform data that correlates wet weather sewer overflows containing untreated sewage diluted with rainfall and urban runoff measured at two control points west of Aquatic Park with water quality information from a monitoring station in Aquatic Park. This information is presented in detail in the ‘Statistical Evaluation, Aquatic Park Coliform Data’ by SOMA Corporation, April 1995, in Appendix G of the Water Quality Study completed as technical backup to this EIR.

Comment

“The DEIR fails to consider the Project's potential to increase bacterial sources such as:

1. material increases in impermeable surfaces that will produce direct run off to the Bay (60 new berths; 60 vessels supplied with new wash down capability);
2. increased parking;

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3. increased discharge and wash down associated with increased year round berth occupancy (176 year round berths vs. 116 berths plus 12 to 60 transient an seasonal vessels).
4. increased fueling;
5. increased vessel pump out (and attendant spills). “

(Margaret Reilly and Roger Beers, written comments)

Response

The EIR analyzed each of the potential sources of bacteria in Bay water and found the most direct correlation between elevated levels of bacteria and wet weather sewer overflows that contained untreated sewage diluted with rainfall and urban runoff. Water quality data from sampling of six stations in the project area showed bacteria levels within Aquatic Park within Basin Plan criteria for water contact recreation and lower than bacteria levels from stations within the Harbor. The statistical analysis of a year of bacteria data from samples taken in Aquatic Park and stations to the west showed a statistically significant correlation of levels of coliform with rainfall data from a previous 24-hour period for the three stations. Correlations between coliform levels in the project area (Inner and Outer Lagoons) and rainfall were not statistically significant for the same period. None of the data available showed a direct correlation between commercial fishing activities in the Harbor and bacteria levels in Aquatic Park. Additionally, the proposed project is designed to accommodate commercial fishing boats that currently use the Harbor to access existing fish processing facilities in Sheds B & D or come to the Harbor for other purposes (fueling, ice, etc.) There is no evidence that the proposed project would attract 60 new boats that have not historically used the Harbor. The proposed project includes features, such as the oil/water separator, pumpout, and restrooms for boat operators that are designed to improve existing conditions in the Harbor.

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Storm Water

Comment

“The real issues to be addressed here are how much extra discharge to the Bay will result, and what are the cumulative impacts of this additional burden on the sewer system.”

“Impacts from Pier and boat deck runoff and wash down. As the Dolphin Club emphasized in its Scoping comments, this is another major source of water pollution which must be adequately assessed in the EIR. The DEIR admits that while Project drainage systems would address some of the current contamination problems, the pier outer aprons and other areas would continue to drain directly into the Bay. (p. 119-20). Clearly, such runoff presents a real possibility of significant impacts to the environment that must be considered in the EIR.

The DEIR acknowledges that another source of pollution in addition to the runoff from pier aprons is the “washdown water from boat maintenance and cleaning.” (p.115). however, this impact is not analyzed at all in the DEIR. This is so despite the fact that the earlier Negative Declaration stated that an increase in boats will mean an increase in “bacterial pollution from fish waste and chemical pollution” resulting from deck washdown. The same is true of pollution from bottom paint peeling. Moreover the Negative Declaration admitted that such impacts cannot be quantified. Neg. Dec., at 17. This clear expression of project impact cannot be ignored as the DEIR does.”

“[T]he residence time in the Bay east of Pier 45 is 1 or 2 hours, compared to 1 to 2 days and 2 to 3 days for the Inner and Outer Lagoons, respectively” (WQS p. 13). Any runoff and discharges from the berths or the vessels berthed in or tied to them will flow directly into Aquatic Park. The proposed flexible “skirt” can, at best, catch floating objects, not contaminants. The EIR fails to evaluate the water quality effects of placing vessels and berths in this new locations.” (Margaret Reilly and Roger Beers, written comments)

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Response

The EIR describes stormwater runoff on page 127 and states that the estimated increase in impermeable surfaces associated with the floating berths and walkways would not affect the existing combined stormwater sewer collection system since runoff would drain directly to the Harbor. Similar to existing conditions, runoff from the proposed harbor improvements would not contribute to the stormwater / sewer system.

The EIR identifies runoff from the existing aprons on the east and west sides of Pier 45 as the areas that would continue to flow directly to the Bay. Water quality information did not identify pollution exceedences of Basin Plan criteria under existing conditions and no changes are proposed for the Pier aprons that would change the existing extent of apron area (or the use of the aprons). The EIR identifies runoff from boat maintenance activities as one of several potential sources of existing discharges to Bay water. Water quality was sampled and was found to be within Basin Plan water quality objectives, and with the exception of dissolved copper levels at two of the sampling stations, the data do not exceed the U.S. EPA water quality standards. The quality of water in the project area is generally within the same range as water quality data from nearby parts of San Francisco Bay collected in 1993 as part of the Regional Monitoring Program. (page 50 of the EIR). The Hyde Street Pier would add impermeable surface, but would also add an oil-water separator to improve existing stormwater runoff conditions adjacent to Aquatic Park. As described on page 14, third paragraph, the floating docks would add an estimated 17,700 sq. ft. of impermeable surface. Runoff from the floating berths (dock) is discussed in the Water Quality Impacts Section of the EIR, on page 120, first paragraph. The conclusion is that 'water quality effects associated with discharge of stormwater to the Bay would not be expected to change substantially from the existing conditions.'

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The EIR identifies washdown water from boat maintenance activities as one of several potential sources of existing pollution to Bay waters. The water quality information resulting from sampling within the Harbor showed water quality within Basin Plan criteria.

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Boat-related / Use of Harbor

Comment

“The DEIR incorrectly dismisses most of the project's potential environmental impacts. The majority of the project's potential environmental impacts, including the majority of the water quality impacts, which are of gravest concern to swimmers, were determined not to be significant based upon the DEIR's disingenuous and unsubstantiated assumption that the project will not generate increased use of the harbor since it is designed to accommodate the existing number of vessels currently using the harbor. It is our position that the DEIR's basic assumption that the project will not generate new or increased use of the harbor is incorrect. Rather, it appears that the project would result in the generation of new or increased use of the harbor and each of the potential environmental impacts must be reevaluated accordingly.”(Aaron Peskin, verbal comments)

“The DEIR excludes discussion of most of the Project’s potential environmental impacts based on the false assumption that the Project will not increase Harbor use. The majority of the Project's potential environmental impacts, including the majority of the water quality impacts which are of gravest concern to swimmers, were determined not to be significant based upon the DEIR's disingenuous and unsubstantiated assumption that the project will not generate increased use of the harbor because it is designed to accommodate the existing number of vessels (currently) using the harbor.

The following are examples of the impacts which are not even discussed in the DEIR:

- potential for fuel or oil spills (DEIR, pages S-8, 117-118).
- potential for waste discharge (DEIR, pages S-8, 119)
- potential for increased litter or trash carried to the Bay. (DEIR, page 120)
- potential for increased odors. (DEIR, pages S-10, 130-133)

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- potential for increased demands for fire public services. (DEIR, page 128)
- potential for increased traffic and parking demand (DEIR, page S-11)
- potential for increased jobs. (DEIR, pages A-13 and 16)".

The Project anticipates virtually continuous presence of sixty vessels (either fishing or pleasure craft). The DEIR's false premise that the Project will not generate new or increased use of the harbor because it will accommodate only those vessels which are currently using the harbor appears to be based on a series of unsubstantiated facts and assumptions.

An even if such transient vessels did rent the new spaces, there is no evidence in the DEIR to show that there are a sufficient number of such boats to fill the proposed number of new berths.” (Laura Taylor, written comments)

The assumption of no increase in vessels is contradicted by statements made elsewhere in the DEIR and is otherwise unsupported.” (Margaret Reilly and Roger Beers, written comments)

Response

It is confusing that the second commenter states that the above impact topics “are not even discussed in the EIR” and then proceeds to provide page numbers in the EIR where each is discussed.

The question about the number of existing boats in the Harbor, and the assumptions about the number of new boats attracted to the Harbor because of the proposed improvements is raised by a number of commenters. The Port does not maintain a ‘count’ of boats in the Harbor on a daily basis, so the EIR relies on information provided by the Wharfinger (John Davey) and the Wharf lease manager (Kirk Bennett) on the number of fishing boats in the Harbor and the market potential for new leases.

Based on the information provided, and consideration of the downward trend in commercial fishing (fish landing information provided by the California

Department of Fish and Game), and improvements made to other harbors in the Bay area (Half Moon Bay Harbor) the previous assumption made in the Moffat & Nichol feasibility study (1988) for the need for an 88 berth Harbor no longer seemed reasonable or prudent. Proposing a Harbor that would be larger than the documented 'need' would be counter to the Port's policy to maintain Fisherman's Wharf for the commercial fishing industry and counter to the tariff that gives fishing boats priority use of berth space in the Harbor. The EIR describes a 'reasonably foreseeable' Harbor for 40 berths (plus, 20 dockside spaces for boats to side-tie or stern-tie), and moves the more speculative 88 berth Harbor to the Alternatives Section VII to provide information showing comparative impacts.

The Port anticipates that the proposed Hyde Street Fishing Harbor would be used by fishing boats from 50 percent to 100 percent of the time, depending on the time of year and seasonal fishing activity. The average use of the leased space by fishing boats would be 70 percent of the year (see Table, C&R page 14). The Port anticipates that as improvements are made to the Harbor it will be able to lease space to existing fishing boats that come to Fisherman's Wharf to unload fish but presently berth in some other location in the Bay area.

A Port survey of fishing boats at other locations in the Bay area (John Davey, May 1994 Memo to D. Hodapp) identified 30 boats that could move to Fisherman's Wharf, however, the Port only expects about ten boats to move to the Hyde Street Harbor as a direct result of building the new facilities. Given that there are 116 spaces in the Inner and Outer Lagoons, plus additional berth spaces at Pier 47A and Fish Alley, an additional ten boats would be an increase of less than 9%, which does not constitute a substantial increase of boats.

Other new fishing boats may be attracted to the area in the future as the fish processors better establish themselves and the fish processing space is fully

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leased. However, these boats would come to Pier 45 to unload fish whether or not Hyde Street Harbor is built.

In any case, it is unlikely that the number of boats would exceed or even approach the numbers using the Harbor in 1988-1990 when the fish landing data shows twice the volume of fish landed in 1995. Yet, even during the years when fish landing volumes were high, the 1991-1992 water quality information available for analysis showed seven of the 199 samples for colony-forming units of coliform exceeding the 1000 Most Probable Number (MPN) per 100 milliliter (Basin Plan Objective) for the Aquatic Park sampling station over a 12 month sampling period. There was no significant correlation between fish landing data and coliform levels in Aquatic Park for the samples analyzed. (see Statistical Evaluation, Aquatic Park Coliform Data, by SOMA Corporation, April 1995, Appendix G of the Water Quality Study completed as technical backup to the EIR).

Based on Port Field Surveys, transient berths represent 20 of the 60 berths in the proposed Hyde Street Harbor, and during herring season they are typically completely filled, and at least partially filled by fishing boats during other seasons such as salmon and crab. Transient boats are boats that are in the Harbor for one day to several weeks, but not all year.

Some of the pleasure craft that may use the Harbor during seasons with low demand by fishing boats are expected to come from Pier 39 since Hyde Street Harbor will likely charge a lower rate than Pier 39 and this area of the Wharf is a favorite location. The EIR does not consider recreational boats to have impact potential greater than what is discussed for commercial fishing boats, therefore, impacts are adequately discussed in the EIR for use of the Harbor.

The comments above do not provide data or factual information to support their perspective that more boats would be attracted to the Harbor by the proposed project, or that a larger number of boats, or recreational boats vs. fishing boats, would make a substantial difference in the water quality conditions in Aquatic Park. This EIR is the second time that these same comments have been responded to (the first time was in response to the earlier Negative Declaration for the proposed Seafood Center, 1990) and the same basic conclusions are made. The available data does not support a conclusion that significant impacts would result from the proposed improvements to Fisherman's Wharf. The impact analysis in the EIR focuses on the cumulative effects of the activities that take place in the project area on water quality, not on a boat-by-boat analysis of potential impacts.

Comment

"It seems highly unlikely that the proposed project would produce no increased potential for waste discharge from boats, since it would provide for the construction of new berthing facilities for a total of 60 boats. These berths would not simply ease the overcrowding in the existing berths in Fisherman's Wharf, resulting in no "new" boats tying up in this area. Rather, they would provide the potential for significantly increased waste discharge from 60 additional boats. This waste would include sewage, garbage, oil, and gas, and would drift on each ebb tide to Aquatic Park, directly west of Hyde Street Pier, which is used by boaters, swimmers, and people fishing from Muni pier.

You note that fish catches have declined 40% since 1988; why does it now seem necessary for the Port of San Francisco to expand facilities for the fishing industry? If trends continue, fish catches will only go lower," (J. Irving, written comments)

"We are concerned about the amount of increased waste discharge that would result from full implementation of this project, i.e., with 60 additional fishing boats, and the impact of this discharge on the Bay's water quality in this area. We believe that the DEIR must assume full use

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of the boat docks and cannot assume that some boats will simply move from the Fisherman's Wharf docks. If the berths are available the DEIR must assume their full use, and must also assume full use of Fisherman's Wharf berths and cannot assume that there will be no net increase in the total number of boats, otherwise why create the berths." (A. Feinstein, written comments)

Response

A response to a change in the number of boats in the Harbor has been provided above (see p. C&R 14). The proposed project includes a pump-out facility at the existing fuel station, restrooms for boat operators and fishermen, and improved supervision of the Harbor by Port personnel. These improvements are expected to reduce, not increase, the potential for solid waste discharge in the Bay. Increased management supervision will provide the necessary enforcement of the existing Rule and Regulation (No. 847) for illegal dumping of wastes by boats into waters of the Harbor. (see page 118 of the EIR).

Comment

"For example, commercial fishing vessels make extensive use of large hydraulically-powered equipment, such as wenchers or "gerties" (which drag boats use to pull nets in), which require pumps using hydraulic oil. These pumps routinely seep oil on the deck, which in turn either gets washed overboard when decks are washed down, or drains into the bilge water, which is pumped overboard. Moreover, the hydraulic lines serving such pumps frequently break or require maintenance, by opening up the line. When such a hydraulic line breaks or is opened up, routinely as much as 5 to 7 gallons of hydraulic oil at a minimum are discharged. It is not reasonable to expect that these kinds of breaks or leakages will be systematically collected and disposed of onshore.

In addition, commercial fishing vessels use large diesel engines, both to power the boats and the pumps above mentioned. These engines are located inside the hull of the boat. These diesel

engines routinely “weep” diesel, which in turn mixes with the bilge water inside the boat and is pumped with that bilge water overboard when the bilges are pumped out.

It is also important to recognize that repair and maintenance activities are typically conducted on commercial fishing boats while in port. These activities include washing down the decks with large hoses, with the result that the oil and fuel, fish scales, dirt and other pollutants which have accumulated on the deck get washed directly into the receiving waters. In addition, when engines or pumps are repaired in Port, there is increased likelihood of fuel spillage or contamination as a result of these activities, which again either gets washed or pumped directly into the receiving waters. Another activity routinely conducted in port is cleaning out the area within the boat reserved for fish storage, commonly behind the engine room. The washing out of this area in turn creates additional contaminants which are typically pumped overboard, while in port.

In addition, commercial fishing vessels are a significant source of sewage disposal directly to receiving waters while in port. The typical fishing vessel is outfitted with a head, a “holding tank” (usually no larger than 40 gallons) to receive the sewage from the head, and a Y-valve, which allows the effluent from the toilet to be directed either to the holding tank or directly into the receiving waters. All that is required to direct that sewage into the water body is simply to turn a valve. It does not take long to fillup a 40-gallon holding tank, and when that occurs, commercial fishing vessels may then simply begin releasing sewage directly to the receiving waters.

As previously noted, that bilge water is likely to contain substantial parts of diesel and lube oil from the hydraulic pumps and engine, as well as other contaminants associated with the operation and maintenance of the commercial fishing vessel.

However, commercial fishing boats seldom make use of such facilities because of the amount of time and expense required to do so. The boat has to be started, with a sufficient crew to move it; it had to be relocated to the area where the vessel pumpout facilities are located; docked there for a substantial period of time while the pumpout is occurring, and then moved back to its berth.

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Such operations can take several hours and entail obvious expense and time which many operators may seek to avoid by simply pumping out the bilge water and dumping it overboard.

It is extraordinarily difficult to police such activities. In addition, everything said above goes doubly for herring boats, which may also use the linear dock space proposed along the Hyde Street Pier during the herring fishing season. Because such boats are not locally berthed year-round, they have even less incentive to comply with any sort of regulations directed at the above problems, and do not typically have holding tanks at all for purposes of temporary storage of sewage generated on board.” (Margaret Reilly and Roger Beers, written comments)

“Impacts From Fuel Spillage and Leakage from Increased Vessels and Fueling Adjacent to Aquatic Park.

The Negative Declaration admitted that "an increase in the number of vessels in the harbor would lead to a corresponding increase in the amount of fuel sold at the fuel dock." Neg. Dec. at 16. The EIR must fully assess the level of impact attributable to the Project in this respect and the level of mitigation necessary to address this impact.” (Margaret Reilly and Roger Beers, written comments)

Response

The EIR discusses potential water quality impacts from boats, including fuel spills and bilge water, on page 115. The EIR goes on to describe the multiple regulations under the Clean Water Act and California Oil Spill Response Act that are in place to control and respond to accidents. The Port’s Oil Spill Notification procedure is outlined in the EIR, page A.39. The Port’s Environmental Health and Safety Section staff keeps detailed records of all spills that are brought to the attention of the Port. In a memo from Roberta Jones, dated August 22, 1996 responding to a request for information on the number and type of spills over the past five years, nine incidents were recorded. Of the nine incidents, two were related to bilge pumping: one in July of 1995 reported 1 gallon of oil by a fishing

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vessel in the lagoon, and one incident was reported in March of 1996 for 1-5 gallons of bilge water that was cleaned up with absorbent pads.

The EIR describes Best Management Practices for protecting water quality in Section V, pages 165-168, including spill prevention and cleanup measures.

Comment

“Again the DEIR did not take into account that some of the primary sources of this pollution would be sited closer to Aquatic Park. Finally, there is no basis for assuming that the Ports regulations would be enforced in the face of the fact that the Port’s enforcement record to date has been abysmal.” (Margaret Reilly and Roger Beers, written comments)

Response

First, boats currently use the portion of the Outer Harbor (Main Basin) proposed for the floating berths to access the fuel dock and Outer Lagoon on a daily basis. Secondly, the proposed berth design shows the boats over 100 feet from the eastern edge of the Hyde Street Pier, with a physical barrier (rockfill and dock with a flexible skirt) between where boats would be berthed and Aquatic Park. This design would be an improvement over what is there now.

The Port has demonstrated it’s commitment to improving conditions at Fisherman’s Wharf through it’s recent and continuing actions: increasing supervision; moving the Wharfinger into a permanent office along Fish Alley; improvements to Sheds B&D on Pier 45; initiating the Pier 45 Advisory Group and the Fisherman’s Wharf Environmental Quality Advisory Committee. The EIR documents the Port’s further commitment to improvements to water quality conditions in the Best Management Practices, pages 165-168.

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Comment

“By building an 80 boat marina for commercial fishermen with its added pollution from gasoline tanks, sewage, dead fish and noise in close proximity to Aquatic Park it will destroy this delicate biosphere.” (W. Sijsling, written comments)

Response

The proposed project is a 40-berth harbor, with dock space for an additional 20 side-tie and stern-tie boats. An alternative 60-berth design was submitted by the Port in response to a comment from the Crab Boat Owners Association for more space in the Main Basin. The EIR does not identify significant impacts to Bay waters or to Aquatic Park from the proposed harbor improvements.

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4. Environmental Impacts
b. Water Quality Impacts -Dredging/Sediments

Dredging/Sediments

Comment

"The DEIR fails to make a distinction between maintenance dredging and dredging deeper bottom sediments which are more likely to contain industrial wastes deposited over a hundred years ago." (Laura Taylor, written comments)

"F. Impacts from Relocating the Rock Fill and Adding Fill at the Foot of Hyde Street Pier.

The DEIR contains no analysis of the impact of relocating the rock and wood fill at the east side of the foot of Hyde Street Pier. The rock and wood fill currently may act as a partial barrier to tidal flow of contaminated water from the Harbor to Aquatic Park." (Margaret Reilly and Roger Beers, written comments)

"The impacts of construction and dredging will mobilize Bay sediments which include lead-based ores, arsenic, solvents, acids, PCBs, petroleum products, paints, mercury, cyanide and other toxic, industrial wastes (DEIR, page 102, 146-162) many of which were dumped into the Bay over a century ago. Once mobilized by the dredging and construction activities and suspended in the water, tidal action will carry these toxic substances into Aquatic Park where they will endanger the health and safety of swimmers. The DEIR fails to analyze or adequately consider this critical matter, and instead dismisses it stating, "[m]inimal worker or public exposure would be expected during sediment dredging and disposal." (DEIR, page 162). The DEIR attempts to add further justification for its failure to address the issue by making the absurd and irrelevant statement that during the maintenance dredging operation last year the "... Port received no complaints ..." (DEIR, page 122). Yet the DEIR states that "... fish exposed to suspended sediment in the laboratory have been shown to suffer mortality as well as sublethal signs of stress." (DEIR, page 125). It is also note worthy that the Port "will continue not to conduct dredging activities during herring season" (DEIR, page 168). The Port's offer to "... coordinate with swimmers. . regarding scheduling of dredging activities to avoid conflict with

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4. Environmental Impacts
b. Water Quality Impacts -Dredging/Sediments

scheduled activities . . ." (DEIR page 168) is meaningless in so far as the majority of swimming in Aquatic Park goes on all day long every day of the year and is not associated with a scheduled activity. In addition many users of Aquatic Park waters including children who are more sensitive to toxic exposures, are not associated with the swimming clubs." (Laura Taylor, written comments)

"The document also mentions that 20,000 cubic yards of dredging would be required to construct the new marina, but does not appear to discuss the estimated frequency and amount of maintenance dredging that would be necessary for the marina to remain navigable. If the site would have the tendency to fill up rapidly with sediment, it may not be suitable for a new marina." (Nicholas Salcedo, written comments)

Response

In response to the first and third comments, although the potential exists, there are no data to indicate that the Port would encounter sediment with elevated levels of contaminants related to historic industrial activities based on previous testing of sediments in the Harbor in the past two years. These tests, required by the Army Corps of Engineers, BCDC, Regional Water Quality Control Board and US EPA have shown relatively clean sediment chemistry to minus 20 feet in Fisherman's Wharf West Lagoon and Inner Harbor. The tests did not show levels of metals or organics that were near any regulated levels and the sediments were not toxic to aquatic life in the elutriate tests and the solid phase bioassay tests using the amphipod *Ampelisca abdita*.

The EIR determined that it was not necessary to require a hydrodynamic model of the Harbor with the proposed relocation of the rock fill and the addition of the floating berths. Figure 6, page 16 of the EIR shows the relocated rock fill as extending slightly beyond where the existing fill is located, thus it is assumed that the same, and perhaps greater barrier between the Harbor and Aquatic Park would be provided compared to existing conditions.

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b. Water Quality Impacts -Dredging/Sediments

In response to the second commenter's concern about the potential of hazardous wastes identified in the Hazards Section of the EIR (pages 146-162) affecting the health and safety of swimmers in Aquatic Park; the commenter has confused dredging information with Maher/Title 22 issues. The Maher Ordinance contains standards for investigating and remediating contaminated soil within the historic tidelands of San Francisco, and it is not applicable to dredging in the Bay. Title 22 contains California's laws regulating hazardous materials and hazardous waste and it would pertain only if contamination levels in dredged material approach or exceed hazardous waste levels. In fact, the Port of San Francisco has never encountered hazardous waste levels of contamination for any constituent tested in any of its dredged materials along the Waterfront. (R. Jones, August, 1996). Further, sediment sampling reported on page 162 of the EIR for 1994, does not include elevated levels of cyanide, solvents or acids, or PCBs or arsenic in the list of toxins in bioassay tests of the Harbor (see sediment characterization, page A.35 of Appendix B in EIR).

In response to the fourth comment: it is difficult to estimate the sedimentation rate in the project area because the rate is variable and fluctuates seasonally depending upon sediment load coming in from the Delta and other factors. Also, the construction of new berths may alter sedimentation patterns. However, in general the Fisherman's Wharf area appears to have a lower sedimentation rate than other nearby areas such as Pier 35. The Fisherman's Wharf Inner Lagoon has only required maintenance dredging once within the last ten years to maintain its 20 foot depth. Other Port facilities can require dredging as often as every other year.

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4. Environmental Impacts
c. Marine Biology

c. Marine Biology

Comment

“In conclusion, you also fail to note that the double-crested cormorant, a California Species of Special Concern, regularly roosts on the breakwater forming the northern boundary of the project area, along with brown pelicans and seagulls. Increased boating activity close to the breakwater would frighten these birds away from a preferred roosting site in the Central Bay.” (J. Irving, written comments)

“Under the California Environmental Quality Act (CEQA), the DEIR must address the impacts of the proposed project to the state and federally listed endangered species, avoid such impacts if possible and propose mitigation measures, if necessary.” (David Behar, written comments)

“Under the California Environmental Quality Act (CEQA) the DEIR must address the impacts of the proposed project to this state and federally listed endangered species, avoid such impacts if possible and proposed mitigation measures, if necessary.” (Linda M Sheehan, written comments)

“The DEIR must address the impacts of the proposed Project to these species. The presence of the California brown pelican and double-crested cormorant will require extensive changes to the DEIR and the Project.” (Laura Taylor, written comments)

Response

The text on page 71 of the Marine Biology Setting Section C. has been expanded to add suggested information on the Double-crested Cormorant and the California Brown Pelican to clarify that these species do frequent the area and have been observed perching on pilings and the breakwater. This clarification does not represent new information that would require recirculation of the EIR. The Draft EIR was sent to US Fish and Wildlife Service and to the California Department of

Fish and Game (see distribution list on page 189 of the EIR) for review and comment.

Additionally, in response to the above comments, Carl Wilcox, the Environmental Services Supervisor for California Department of Fish and Game, Region III, was contacted by the EIR biologist to confirm that there would be no impacts to these species and that formal consultation would not be necessary. The communication confirmed that the proposed project would not impact recognized roosting habitat for the California brown pelican and would not impact nesting colonies or roosting habitat for the Double-crested cormorant. Temporary displacement of the pilings (perching site) would not constitute an impact to either species. Perching habitat is prevalent in the project vicinity and the birds would likely relocate a few hundred yards away during project construction and would be free to return to perching locations after construction. The proposed floating berth would add to the existing perching locations in the Harbor.

The perching location for the California brown pelican is adjacent to the fuel dock where frequent boat activity exists. Continuation of boat activity in the Harbor would not impact these birds.

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4. Environmental Impacts
d. Public Utilities / Public Services

d. Public Utilities / Public Services

Comment

“In addition to water quality impacts, the Project may result in a number of other impacts that require further review, disclosure and analysis in the context of the EIR. These additional potential impacts include, but are not limited to, impacts to utilities and public services, transportation impacts and noise. Because members of the Commenters will all be subjected to these impacts as well as the preceding ones, they submit that those impacts must be independently reviewed in the EIR.” (Margaret Reilly and Roger Beers, written comments)

Response

Impacts to Public Utilities are discussed on pages 126-127. No significant impacts are identified. Potential impacts to Public Services are discussed on pages 128-129 of the EIR. No significant impacts are identified. Transportation impacts are discussed in a separate technical report prepared by Korve Engineering in consultation with the Department of City Planning, Transportation Section, and in the EIR, pages 134-144. No significant impacts are identified. Noise impacts were focused out of the EIR in the Initial Study (page A.17-A.18).

e. Air Quality / Odor

Comment

“Increased boat traffic may occur due to expanded docking facilities and project improvements. Project implementation may result in some increase in odors associated with boating and vessel activity such as diesel and/or gasoline fumes. The EIR should state the relationship of possible increases in particulates with existing air quality control measures currently regulated by the Bay Area Air Quality Control Board.” (Joanne Wilson, written comments)

Response

Odors are discussed in the EIR on pages 130-133 as they relate to fish processing. Odors from diesel fumes are not discussed based on the assumption that the existing fuel dock (adjacent to Aquatic Park) and fishing boat traffic accessing the fuel dock and lagoons would not substantially change from the existing conditions. The Initial Study indicated that demolition and construction activities would not raise dust (particulates) in the area to a level that would have significant impacts on air quality. Most of the construction activity would be in the water installing pilings and floating docks.

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4. Environmental Impacts
f. Transportation / Parking

f. Transportation / Parking

Comment

“Traffic and circulation. “Addition of project traffic plus future traffic from potential development...would be expected to result in level of service “E” (an unacceptable level of service)” at certain intersections. Clearly, this is a significant impact associated with the Project.” (Margaret Reilly and Roger Beers, written comments)

Response

The commenter is incorrect. The traffic impacts reported in the EIR, page 140 second paragraph, state that “under the Proposed Project all intersection operating conditions would be similar to those identified for Existing Plus Project Conditions, and all intersections would operate at LOS B or better. The exception is the intersection of Jefferson/Powell/The Embarcadero which would change to LOS C under cumulative weekend midday conditions.”

The reference could have been to pedestrian impacts in an existing congested crosswalk at Jefferson and Taylor where midday weekend LOS is E. This condition would remain at LOS E for pedestrian circulation on weekends.

Comment

“There also appears to be a shortage of adequate parking for the project although the EIR tries to explain this away (inadequately). We already have an impossible parking problem with the project and this situation needs to be addressed.” (R. Miller, written comments)

Response

Parking for the fishing industry has been reported by the Pier 45 Advisory Group to be inadequate. The Port has recently initiated a special study of parking and truck circulation on Pier 45 for the fishing industry. (Rajappan & Meyer

Consulting Engineers, September 1996). The study resulted in a recommended reconfiguration of truck parking in the 'valley' and dedicated parking in Shed A of 108 industry spaces. This recommendation is reflected in the Port's suggested Alternative, described in Section D, Staff Initiated Text Changes and Errata.

Comment

"1. The proposed project will generate additional cable car ridership in Aquatic Park and contribute to existing over-capacity-conditions by generating up to 133 trips during the weekend midday peak hour. Although existing MUNI lines in the vicinity have additional capacity that may be used by increased ridership. Some increase in pedestrian congestion in transit area may occur as a result of the project. This should be documented in the EIR." (Joanne Wilson, written comments)

Response

Potential transit and pedestrian impacts are discussed in the EIR and no significant impacts are identified from changes caused by the proposed project. (pages 142-143 of the EIR).

g. Historic Resources

Comment

“The preservation of the area as authentic and historically accurate should be considered. Our club is the oldest club along the Pacific Coast even though we have not always been at the current location. However, our building, along with the Dolphin Club and Sea Scouts must be preserved.” (Lisa McCally, written comments)

Response

The proposed project is within the jurisdictional boundary of the Port of San Francisco and would not in any way change the existing Aquatic Park or buildings leased from the City by the Dolphin Club or South End Rowing Club. The proposed project is to improve existing conditions of the Harbor facilities historically used by the commercial fishing industry.

Comment

“Two buildings listed on the National Register of Historic Places will be moved as a result of the Project: The Tubbs Cordage Company office at 611 Front Street and the Lewis Art houseboat on Hyde Street Pier. Moving historic structures does result in a significant impact on the environment which must be considered in the DEIR. The fact that such structures may have been moved in the past does not negate the requirement to consider the impacts of moving them again as a result of this Project. Consultation with the State Historic Preservation Officer would be required, and, if these structures are subject to Article 10 of the City Planning Code, review by the San Francisco Landmark's Advisory Board would be required. Impacts to historic buildings and structures are also subject to Proposition M.” (Laura Taylor, written comments)

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Response

The proposed project no longer includes a new two-story Harbormaster's Building on the Hyde Street Pier and would not move or in any way change or affect the Tubbs Cordage Company or Lewis Ark houseboat. The Port has coordinated with the Maritime National Historic Park to ensure that historic ships moored on the east side of the Pier (Eureka and Hercules) would have room to maneuver and that they would not be affected by the floating harbor.

Comments

"The DEIR further reveals that 4,300 square foot of the Bell Smoked Fish Building at 490 Jefferson Street would be demolished to make room for 24 parking spaces (DEIR pages S-5, 21, 37). The impacts of the Project on this building, as well as impacts on other historic buildings within the Project area as identified in the San Francisco Department of City Planning's 1976 Inventory or in its Northern Waterfront Findings Report, must be considered in the DEIR. In fact, CEQA requires the DEIR include a study to determine if any properties of historic or cultural significance may be impacted by the Project whether or not such properties previously have been designated as landmarks, listed on any historic register or identified by any previous studies.

In addition, five historic ships are a part of the National Park Service's San Francisco Maritime National Historic Park collection at Hyde Street Pier, several of which are listed on the National Register of Historic Places. Given the close proximity of the proposed Harbor expansion to these historic ships, the physical and visual impacts of the Project on these ships must be analyzed in the DEIR. The Initial Study dismisses visual impacts incorrectly concluding that "No scenic views or vistas now observed from public areas would be substantially degraded . . ." (DEIR, page A-16). A visual impact study must be included in the DEIR to determine the extent to which the Project will alter the scenic views of the historic ships as well as scenic vistas from them.

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g. Historic Resources

“Not only will locating a large harbor/marina facility covering a large surface area in the outer harbor a few feet distant from the historic ships and the National Park cause visual impacts to these historic resources, it may result in impacts to the condition and proper maintenance of the ships. It is our understanding that the historic ship Eureka must be turned every six months and that this will become much more difficult if the new harbor is constructed in the location proposed.” (Laura Taylor, written comments)

Response

Archaeological and Historic Consultants were retained as part of the EIR consultant team to address the potential impacts to historic properties, including the Bell Smoked Fish Building. The technical memo completed for the study is included in the Project File #93.574E, available for review in the Planning Department at 1660 Mission Street. The study concluded that the portion of the Bell Smoked Fish Building to be demolished for parking for the Harbor did not have historic integrity and would not meet the criteria for eligibility as a historic structure. Inclusion in the 1976 Architectural Inventory of San Francisco, conducted by the Department of City Planning, does not formally designate the building as historic.

The Harbor has been used historically for commercial fishing activities and would continue to be used primarily for this purpose with the proposed project. The addition of a floating Harbor would be visible from some viewing points on the Hyde Street Pier and historic boats on the east side of the Pier. The presence of fishing boats moored in the Harbor would not change the visual character of the Harbor and would be in keeping with the historic character of the area.

The EIR includes information on historic property and archaeological resources on page 171, under Mitigation Measures for construction activities. Information about the SF Maritime Historical Park has been added to the EIR (page 40) to address adjacent land use of historic significance. An architectural evaluation of

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4. Environmental Impacts

g. Historic Resources

the building at 490 Jefferson Street (Bell Smoked Fish Building) was conducted for the EIR by a certified architectural historian (Ward Hill) and it was concluded that the building was not eligible for the national Register of Historic Places due to a loss of integrity. (see project file 94.574E.)

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4. Environmental Impacts
h. Cumulative and Construction Impacts

h. Cumulative and Construction Impacts

Comment

“I have heard that there is a proposal to build a new marina adjacent to Hyde Street Park. I know that there was an environmental impact report done. I have heard that the report does not address the multi-use aspect of the Hyde Street Park. The surrounding beaches, the swimming clubs near by, generally speaking Aquatic Park.

I ask you please, provide more research and information in the Environmental Impact Report and honestly provide the citizens of San Francisco the information relating to the effects of more motor traffic, more waste and more general dumping. Building a new marina is taking the pedestrian right away from a natural crosswalk in the San Francisco Bay. It shows lack of respect.” (Leslie Anglim, written comments)

Response

The issues identified in the comment are addressed in the EIR under Land Use (page 110), Transportation (page 134) and Litter and Trash (page 120).

Comment

“The EIR fails to adequately consider the cumulative impacts of the proposed project and other foreseeable projects.” (Margaret Reilly and Roger Beers, written comments)

Response

Cumulative impacts are discussed under relevant environmental topics. For example, traffic impacts consider growth, existing uses of Sheds B & D, the MUNI F-line, the changes to the Embarcadero and the triangle at Fisherman’s Wharf and the Pier 39 garage and Underwater World. The Land Use Section discusses the Port’s proposed Waterfront Land Use Plan. The Water Quality Section includes the cumulative effects of the proposed project in the context of

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existing boat use of the Harbor, existing fish processing and trading activities on Pier 45 Sheds B & D.

Comment

“This project, as well as the other existing prospective land uses in the Fisherman's Wharf area, are the subject of the broader Draft Waterfront Land Use Plan (the "Waterfront Plan") mandated by Proposition H. The Waterfront Plan will establish definitions for water dependent and maritime uses and will identify acceptable uses for the waterfront including the project area. The Waterfront Plan is currently the subject of a Master EIR. It seems counter-productive and premature for the EIR on this project to move forward before the Waterfront Plan and associated Master EIR are complete, particularly since portions of this project involve addition of new activities (which may or may not constitute maritime uses) on Port piers and within 100 feet of the shoreline.

Courts have held that it is ‘vitally important that an EIR avoid minimizing cumulative impacts,’ and have struck down agency decision when an EIR did not fully comply with CEQA's requirements to analyze such impacts. *Citizens to Preserve the Ojai v. County of Ventura*, 176 Cal.App.3d 421,431 (1986). The EIR in the instant case does not contain a sufficient description of cumulative impacts under either definition.” (Margaret Reilly and Roger Beers, written comments)

Response

The Waterfront Land Use Plan EIR is a Program EIR (CEQA Section 15168), not a Master EIR. The Hyde Street Fishing Harbor /Pier 45 Sheds A & C project predates and is included in the WLUP DEIR under all of the alternatives analyzed, incorporating various assumptions about the use of new berths, ranging from some use by recreational boats as an interim use (Alternative A) to full use of the berths by commercial fishing vessels (Alternative B and No Project). The

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Alternatives also assume varying levels and types of development in Sheds A&C. The No Project Alternative assumes no new development in the sheds.

The Hyde Street Fishing Harbor/Pier 45 Sheds A&C project, as with other recent proposed projects and approved projects in the area under the jurisdiction of the Port is not dependent on consideration or approval of the WLUP to proceed. The Hyde Street Fishing Harbor project is permitted under the terms of Proposition H and would be allowable under the WLUP, and could be approved with or without the Waterfront Land Use Plan in place.

The WLUP is described in the EIR on page 40, as part of the Land Use, Zoning and Plans Setting Section, and Current and Probable Future Projects in the Project Vicinity.

Comment

“At a minimum the cumulative impacts from the following projects need to be considered and analyzed in conjunction with the Project: Proposed Pier 47A upgrades, Underwater World at Pier 39, new gas storage tanks in the Fish Alley area, the above mentioned Waterfront Land Use Plan, and the Pier 45 Sheds B & D upgrades. The DEIR inadequately identifies “[c]urrent and probable future projects in the project vicinity” (pages 39 and 40) to include Underwater World Aquarium at Pier 39 and the Waterfront Plan, then fails to address their impacts combined with the impacts of this Project.” (Laura Taylor, written comments)

Response

Each of the above mentioned projects, and also the F-line and plaza improvements at the Triangle Lot, are included as part of the Setting Section of the EIR because they have been approved and some (Sheds B&D improvements, F-line, fuel storage tanks along Jefferson Street, and Underwater World) have been constructed. The exception is the Waterfront Land Use Plan and Maritime

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National Historical Park General Management Plan (added since the DEIR).

These projects are included in the traffic and parking future growth assumptions, and where relevant (existing fish processing/trading activities along Fish Alley, and Sheds B&D, and existing commercial fishing boats in the Harbor) are addressed in the water quality analysis.

Comment

“It further states in an apparent attempt to avoid considering the Project's cumulative impacts as required by CEQA that the "Environmental review of the Waterfront Land Use Plan will include a *general* discussion of potential cumulative impacts of the proposed Hyde Street Harbor and Pier 45 project: (DEIR, page 40). Obviously, a general discussion of cumulative impacts that may be included in a future document would not constitute legal compliance with CEQA's requirements for purposes of this DEIR.” (Laura Taylor, written comments)

Response

The reference to the statement on page 40 relates to the EIR being completed for the Waterfront Land Use Plan, describing that the WLUP EIR would include a Program level discussion of the Hyde Street Fishing Harbor/Pier 45 Sheds A&C. This EIR includes project specific analysis of cumulative impacts for traffic, parking and water quality.

Comment

“One, in going through the Draft EIR, the conclusion is that there is not going to be ultimately significant environmental impacts, and my concern is about the impacts during the course of construction, how long they are going to last, what their scope will be. I see multiple references to compliance with State and Federal Law and procedure, and I would appreciate a little bit fuller treatment of what the actual impacts are going to be.” (Hector J. Chinchilla, verbal comments)

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h. Cumulative and Construction Impacts

Response

Construction impacts are addressed in the Summary, page S-9 under Water Quality (as part of the dredging discussion) and on page S-12 under Hazards (as part of the utility corridor and dredging). No significant impacts have been identified in the EIR, however, measures to reduce the effects of less than significant impacts from the proposed project are described in detail in Section V of the EIR, starting on page 165.

Also, since the time of the Public Hearing and close of comments on the Draft EIR, the Port has established and funded a Fisherman's Wharf Environmental Quality Advisory Committee for Fisherman's Wharf. The committee includes members of the swimming and rowing clubs and members of the commercial fishing industry and Fisherman's Wharf merchants. This committee will work with the Port to develop further measures to improve the existing conditions in the Harbor and Fisherman's Wharf, and help to develop a plan to monitor the effectiveness of the measures as they are implemented.

5. MITIGATION

Comment

“The DEIR and WQS acknowledge that human activity in the project area is a significant potential source of impact on water quality. The DEIR and WQS cite laws and Port rules and regulations which prohibit discharge of contaminants into the Bay. The mere existence of laws and prohibitions cannot be considered effective mitigation measures.

None of the studies previously done in connection with earlier versions of this project takes adequate account of the ways in which fishing boats can contribute additional pollution to receiving waters where they are berthed, or the extent to which any proposed measures can truly be effective in mitigating those impacts.

With the exception of measures to address possible impacts to cultural resources, the Initial Study does not identify for the project a single mitigation measure to be considered in the EIR. This is astonishing considering the magnitude of the proposal and the admitted increase in fishing related activity that the Project entails. It is even more astonishing given the public controversy surrounding the project and the extensive suggestions that have been made to the Port and City Planning Department with regard to methods for mitigating the Project’s impacts, which are part of the record for this Project in the Department of City Planning.

As discussed above, the Initial Study throughout acknowledges that the project may have impacts that are not wholly avoided by project components. Commenters want to make sure that the EIR does not rely, as the earlier Negative Declaration in large part did, on discretionary “enforcement” of regulations as the principal means of mitigating significant impacts. This approach is not supportable in fact or law.

It is clear that this type of unsubstantiated “mitigation” is not sufficient under CEQA. CEQA requires that in order for an agency to rely on mitigation measures as a basis for assuming that project impacts will be avoided, such measures must be fully developed and must be the subject

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5. Mitigation

of a binding commitment. *Citizens for quality Growth v. City of Mount Shasta*, 198 Cal. App. 3d 433, 441 (1988).

In connection with the proposed Seafood Center and berthing project, significant collective efforts were made over several years to examine pollution sources and to propose methods to establish water quality baseline standards, monitoring and post project operating and mitigation requirements. The EIR process should examine all relevant existing documents and data (see partial reference list set forth in Attachment B below), and should insure that the fruits of these efforts are not lost. We have attached hereto as Attachment D a copy of the Water Quality Monitoring Plan which was developed by Commenters in connection with the earlier project proposal by the Port. All of the measures set forth in the Water Quality Monitoring Plan remain important steps to be taken today to ensure that water quality in the area is not further degraded and that there is some chance for improvement. This plan should be the starting point for the development of appropriate mitigation measures to be considered in the EIR. Additional mitigation measures are set forth below.

We believe that it is important to promptly establish a technical committee (including representatives of the Dolphin Club and the Concerned Citizens) to meet and provide comments on water quality issues in the project area and aid in the development of a Water Quality Management Plan (the 'Plan').

We recommend that the Port participate in the State Water Quality Control Board's Mussel Watch Program (and insure continuation of that monitoring activity during the operating life of the project) as part of establishing and monitoring standards for the Plan.

Ensuring that Mitigation measures are fully enforceable. We assume that appropriate water quality baseline standards and water quality monitoring procedures defined by a Water Quality Management Plan will be imposed as a permit condition. In addition, to be fully enforceable, the Water Quality Management Plan should include provision for post project mitigation and corrective action in the event of degraded water quality, together with meaningful enforcement mechanisms to insure compliance with the plan.

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5. Mitigation

In response to the DEIR, The Dolphin Club has presented a proposed Water Quality Management Plan which would serve as a vehicle to achieve the following:

- * Configure a Water Quality Working Group composed of appropriate stakeholders
- * Identify technical expertise needs
- * Identify funding or other sources for technical expertise
- * Identify funding to develop compatible use water quality management strategies
- * Identify funding to implement strategies
- * Provide a permanent forum for managing water quality-compatible use issues.

We request that a Water Quality Management Plan and Water Quality Working Group be included as a requirement of the Final Environmental Impact Report.

For coliform, enterococcus, subsurface water, oil and grease, subsurface water fraction hydrocarbons of petroleum origin, surface microlayer oil and grease, surface microlayer fraction hydrocarbons of petroleum origin.

Likewise, how can the EIR analyze and mitigate the water quality impacts associated with increased seafood landings and handling when the increase in those activities are not quantified? (Margaret Reilly and Roger Beers, written comments)

Response

The above comments are summarized from comments on this EIR and previous comments submitted by the same commenters on the Initial Study and on a previous Negative Declaration for the Seafood Center. Complete copies of the referenced Water Quality Monitoring Plan and Water Quality Management Plan previously submitted to the Department of City Planning, Office of Environmental Review, by the attorneys (Margaret Reilly and Roger Beers) for the Dolphin Club

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and Users of Aquatic Park, and Friends of Aquatic Park are part of the public record and project file (#93.574E). As the commenters point out by page number in the EIR, several of the reasonable and feasible mitigation measures that they have suggested have been included as part of the project, or are required by law.

The commenters make the claim that the EIR states that “human activity in the project area is a significant potential source of impact on water quality”. The EIR does not use the term ‘significant’ to describe activities that have been identified as potentially causing water quality impacts. (see Page 111 of the EIR, first sentence). The determination of significance is one of the key decisions in the CEQA process (CEQA Guidelines Sections 15064 and 15065). CEQA defines a “significant effect on the environment” as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. (Section 15382). CEQA goes on to define ‘substantial’ as “substantial evidence used in these guidelines means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made is to be determined by examining the entire record. Mere uncorroborated opinion or rumor does not constitute substantial evidence.” (CEQA, Section 15384)

In May of 1996 the Resources Agency of California published proposed revisions to the CEQA Guidelines. In the proposed revisions for determining a significant effect under Public Resources Code 21083, Section 15064, subdivision (c), the guidelines will: “reflect that lead agencies are not required to consider an effect to be adverse based on opinion not supported by facts”; and under subdivision (e) proposed revisions would require “lead agencies to use previously reviewed regulatory standards as a threshold for determining significant effect on the environment”. Previously reviewed regulatory standards already reflect a well-

considered determination of what is appropriate to require for resource protection. This change in the guidelines is intended to relieve lead agencies from redundant analysis.

This EIR has used existing water quality objectives (Basin Plan) and standards (Environmental Protection Agency) as the threshold for determining significance for water quality impacts. The EIR presents relevant data and information describing water quality conditions in the study area for each of the water quality parameters that could potentially be effected by the existing and proposed activities in the Harbor. The EIR includes water quality sampling information from previous years and sampling information from studies completed specifically for this EIR. The EIR does not present the information as exhaustive or comprehensive or conclusive in terms of regulatory compliance. A determination of regulatory compliance is not within the purview of the EIR and was considered beyond the scope of what would be necessary for this EIR. The analysis of the information available in the public record showed water quality conditions in the Harbor and in Aquatic Park within the objectives established by the Basin Plan and (except for copper at two locations and the copper standard for the Bay is currently under review due to high background levels) within the standards established by EPA for water contact recreational water quality.

The quality of water in the project area is generally within the same range as water quality data from nearby parts of San Francisco Bay collected in 1993 as part of the Regional Monitoring Program. (see Table 1, Appendix B, page A.32). After examining the total record of information on water quality, and considering the CEQA guidelines for using established standards for determining significance, the EIR concluded that no significant water quality impacts would result from the proposed project. The EIR also concludes that there is no evidence in the public record to determine that the proposed improvements would result in a substantial

growth in the number of boats in the Harbor over the number that have been in the Harbor on a seasonal basis over the past several years

Further, in response to the above comment: (i) the Port does not anticipate the project to lead to a substantial increase in fish landings; (ii) there is no evidence in the record to show that fish landings would exceed or equal the ten year peak volumes; (iii) water quality, even during the peak periods for fish landing at Fisherman's Wharf (1988-1990) was within Basin Plan Water Quality Objectives in Aquatic Park; (iv) no correlation was found between increased fish landings and water quality in the statistical analysis of coliform data; and (v) improvements to Sheds B&D on Pier 45 for disposing of fish processing waste were completed in 1995 (p. 112-115 of the EIR and the Water Quality Study). All of these statements provide substantial evidence in the record to allow the Port Commission to find that any anticipated increase in fish landings and handling associated with the proposed project will not result in a significant water quality effect on the environment.

CEQA requires mitigation for significant impacts. (CEQA Guidelines, Section 15370). Absent "significant impacts", nonetheless, the proposed project includes measures and actions to improve existing deteriorated and inadequate facilities for the fishing industry (a pumpout, a restroom, improvements to the fuel dock, parking for boat operators, oil/water separator, floating berths, flexible skirt barrier to prevent floatables from leaving the Harbor). These measures and others are described in the EIR, Section V, Mitigation and/or Improvement Measures.

The Port has also established the Fisherman's Wharf Environmental Quality Advisory Committee to provide input on the proposed improvement in the Harbor, and to identify other feasible and prudent measures to improve existing conditions (see p. C&R 229).

Comment

“The DEIR lacks adequate, enforceable mitigation measures. So call “mitigation measures” proposed in the DEIR consist of deferring mitigation to the future, the preparation of future designs or plans, continuing current policies, complying with regulations that the Port must already comply with, and mitigating only when feasible. In other respects, the DEIR simply assumes that mitigation measures will be undertaken in the future without specifying what agency will be responsible for the mitigation. These ‘mitigation measures’ do not meet the standards set by CEQA.

The proposed project incorporates minor physical and operational mitigation measures related to water quality (See Appendix D attached). The measures are insufficient to prevent adverse impacts of project activities, and the mitigation measures set forth in the attached Appendix E should also be considered.

Accordingly, the Commenters have developed a proposed Water Quality Management Plan which contains overall measures necessary to mitigate the project's water quality impacts. See Appendix F. This Water Quality Management Plan should be specifically considered for implementation as part of the Project in the Environmental Impact Report.

It is apparent that existing water quality conditions in the project area are required to be reported to enforcement authorities. It is also apparent that the Port relies entirely on “self-policing” as the only reporting and enforcement mechanism in place. Placing the fox in charge of watching the hen house is not a mitigation measure.

The Wharfinger on duty Monday through Friday oversees leasing and collecting lease revenues. The DEIR provides no substantiating evidence that the Port or any other agency actively enforces water quality related laws, rules and regulations. Without the log or record of enforcement, enforcement of existing laws cannot be evaluated as an effective mitigation measure.

Mitigation Measures incorporated into the project to address water quality concerns (and other mentioned)

Measures Incorporated (S-13; see DEIR Section V (pp. 167-168):

1. Store oil spill containment equipment at gas dock and Wharfingers office per regulatory requirements. (S-5, pp. 166-7).
2. Replace antiquated fuel line with new fuel line to gas dock per regulatory requirements. (Include automatic shut off, leak detection system, remote shutoff switch and pressure sensitive features. (S-5, 16 Figure 6, p. 167).
3. Oil water-separator to pre-treat runoff from fuel dock prior to Bay discharge per regulatory requirements. (Area to be drained and treated is not clearly identified; may also include parking and work dock area at foot of Hyde St. Pier) (S-5, 17 Table 3, p. 167).
4. A pump-out station at the fuel dock. (p. 167)
5. City of S. F. Fire Dept. will periodically hose off breakwater (accumulates debris and animal waste). (p. 168)
6. Port skiff will pick up floating debris 1-2 times daily.
7. Berth design as shown in DEIR to include a flexible “skirt” to eliminate gaps between floats.
8. Dredge activities scheduled to avoid conflict with swimmers in Aquatic Park.
9. Temporary wraps for piles removed from the harbor.
10. No dredging during herring season.
11. Coordination with restaurant and commercial operators to improve housekeeping practices.
12. Weekday supervision of harbor.

Other measures mentioned in DEIR but not listed in Section V. Mitigation Measures incorporated into the project.

- A. Oily waste disposal bins (2): On work dock and at fish Alley (S-5)
- B. Existing laws, rules and regulations. (p.166)
- C. Expand “Best Management Practices Plan” to include the measures contained in DEIR Section IV for enhancing water quality (S-13; pp. 109-123). (Not clear what the BMPP currently contains or what would be added – see p. 165 and pp. 115-116).

Additional mitigation measures which should be included as conditions of project approval.

1. Vessel Management:

- * All vessels in the harbor for more than 12 hours will have leases or otherwise be “logged in” by the Wharfinger.
- * No more than 176 vessels shall be present in the harbor at any time. For purposes of calculating the number of vessels present, all vessels physically present shall be counted daily at an hour when the most number of vessels are likely to be in the Harbor. In addition, all vessels holding a lease or other permission to occupy space in the Harbor shall also be counted, whether or not such vessels are physically present.
- * all vessels in the harbor, whether paying tenants or not, will be required to have dye tablets in their bilge and heads, and absorbent pillows in their bilges, at all times that they are in Harbor.

2. Monitor and correct post-project effects:

- * Observe the effectiveness of new berths to block debris and petroleum products. Augment if needed.
- * Observe effects of placement of boulders, etc., around the fill portion of the Hyde Street Pier on water quality. Correct if design selected creates water quality problems.

- * Observe effects of out fall for runoff system at Hyde Street. Correct if it affects water quality.
 - * Observe fuel dock operations for usage increase or other water quality impacts. Correct if it affects water quality.
 - * Observe new pump-out operations for effects. Correct if it adversely affects water quality.
 - * Observe effects of Project on harbor seal and seal lion population. Correct if it adversely impacts water quality, or if it presents increased safety risks to swimmers in Aquatic Park.
 - * Observe compliance in Harbor with applicable lease terms, laws, rules and regulations which affect water quality. Correct non-compliance.
3. the Water Quality Management Plan (the “Plan”), attached hereto and incorporated herein, must be incorporated into the finally certified EIR. The Port must be obligated to comply with the Plan as a condition of Project Approval.
 4. Water Quality working Group - operating per Plan.
 5. Establish Baseline Standards - established per Plan.
 6. Government Standards - as minimum water quality standards per Plan.
 7. Monitoring Requirements - established per Plan.
 8. Investigative and Remedial Action Required - established per Plan.
 9. Response Plans - as appropriate per Plan.
 10. Recording keeping and reporting requirements - per Plan.
 11. Construction/Dredging safety standards: Port will post 5 days prior notice on the Aquatic Park public beach and on the beach between the Dolphin and South End Clubs (with mailed copies to each club), of any work that could result in:

- * equipment in Aquatic Park
- * debris or other discharges in Harbor or Aquatic Park water
- * Disturbance of Bay silt

No work involving the foregoing will be conducted on any day that either swim club is conducting organized competitive swims (annual swim schedules are available on request).

At all times that work involving the foregoing is occurring in the Fisherman's Wharf area, the Port will install and maintain containment booms between the work and Aquatic Park, in a manner sufficient to prevent all objects and pollutants floating within the top two (2) feet of water from moving into Aquatic Park.

12. Water Quality Management Practices - established per Plan to include:

Inspection and Maintenance: The Port will establish and follow a schedule of inspection for the following:

- Under pier waste and drain pipes
- other aspects of Port owned facilities in the harbor which could impact water quality if in disrepair.

Enforcement Activity: To the extent permitted by law, the Port will document as a public record all water quality related fines and enforcement activities related to Fisherman's Wharf Operations. Port will request that other agencies with enforcement jurisdiction notify the Port of enforcement activities in which such agencies engage.

Signage Program: signage will be maintained throughout Fisherman's Wharf Operations noticing rules and water quality protection procedures, including:

- * Anti-litter

- * Prohibition against feeding birds and marine mammals (including educational material)
- * Hotline numbers for emergencies
- * Location of emergency equipment
- * Notice to close discharge valves on vessels while in harbor
- * Notice to use absorbent pillows in bilges, and to use dye tablets in bilges and heads while in the Harbor
- * Anti-water pollution messages

Hazardous Materials: Fisherman's Wharf Operations shall be routinely required to register with and complete materials data survey report of San Francisco Environmental Health Department on hazardous materials. Copies shall be on file and available for public inspection at the harbor office.

Public Waste: The Port will maintain sufficient trash disposal containers with secured lids and adequate pick up schedules for public access areas and for users of the Fisherman's Wharf Operations (e.g., oily waste, used absorbent bilge pillows).

Response Plans: The Port will develop and maintain written plans to address potential pollution sources associated with Fisherman's Wharf Operations:

- * Emergency Response Plan for fuel dock spills
- * Emergency Response Plan for pump-out facility spills
- * Emergency Response Plan for vessel spills (petroleum, other)
- * Response Plan to minimize sources of coliform and enterococcus
- * Response Plan to minimize sources of surface oil, grease and fraction hydrocarbons of petroleum origin (organic oil slick)

- * Response Plan to minimize sources of subsurface oil, grease and fraction hydrocarbon of petroleum origin
- * Response Plan to minimize sources of priority pollutants.”

(Margaret Reilly and Roger Beers, written comments)

“The final point is this: Two very important mitigation components did appear in the original 1988 project, and they are now missing. The first is the Water Quality Management Plan, the second was an advisory group, and, in that case, it was a Harbor Advisory Group. The Port had proposed both as mitigation measures for the 1988 project. These concepts have been dropped from the current project. They should be included and required. Today we present Water Quality Management Plan, that's the Dolphin Club presenting a plan. It calls for a water quality working group composed of all the stakeholders; the Port, water quality agencies, pier tenants, water tenants, both the swim clubs. It's designed to find the funding and methods to manage water quality. These two measures, the plan and the working group, are what the water in Fisherman's Wharf desperately needs. This is a serious situation.” (Margaret Reilly, verbal comments)

Response

Under CEQA, mitigation is required for significant impacts and none have been identified in the EIR. The Port is required, under existing regulatory standards and laws, to implement measures to minimize potential impacts to the environment. Examples include: the Oil Spill Contingency Plan (page A.39-40); remediation of hazardous waste that threatens the public health or environment (page A.57); sediment testing and disposal procedures (page A.63) and meeting Basin Plan Water Quality Objectives (pages 42-43).

Other measures to improve existing conditions in the Harbor have been included in the EIR, Section V, under Best Management Practices. The measures described as ‘Included as Part of The Proposed Project’ (page 167-168) have been committed to by the Port for implementation. This list of measures can be added

to by the Port Commission as part of project approval, particularly if the Fisherman's Wharf Environmental Advisory Committee recommends other measures as suggested by the commenters above. Because no significant impacts have been identified for the proposed project, or alternatives, the EIR can be certified by the Planning Commission, without mitigation measures or conditions of approval.

Comment

"Page 116 - last para - It doesn't matter whether the Port has responsibility to do something. DOES IT DO IT. If not currently done, or ineffectively done, this project must include a comprehensive water quality monitoring and improvement plan as a required mitigation measure for the project.

Page 117 - middle para - same comment as above.

Page 118 - top partial para - how will existing spaces be used in future?

- Is Wharfing really on top of spill and cleanup issues? How many people have been cited, warned whatever?

- How far away (in time to get there, wait in line if necessary, and return) is Gashouse Cove or Pier 39 or use of those facilities?

Page 119 - para 2, last sentence - is this included as mitigation? If not, it should.

"By the same token, the monitoring (effective monitoring) and enforcement must be part of the project because Port has shown it is uneven at best in these areas. The mitigation section needs substantial beefing up to incorporate reasonable mitigation measures suggested by swimmers and rowers and other users of the water and Port."

"And I think the second part of this, because when you have a project that basically is providing environmental mitigation as well as the overall project, and the project itself has large

components of being environmental mitigation. I think the Port and the City have responsibility to pull up a lot more in the environmental mitigation section, particularly on water quality, that they have not included in this report. If the Port has water quality improvement measures that aren't in here, they should be included in here. And if they don't have them, they certainly should be including them.” (Sue C. Hestor, written comments)

Response

In response to comments about oil spill cleanup (EIR pages 116, 117, 118) the Port's Environmental Health and Safety Section coordinates oil spill response notifications and clean-up activities. The City of San Francisco and the Port developed a San Francisco Spill Prevention and Response Plan in August 1993, which provides an incident command system in the event of a major oil spill in the Bay near San Francisco (with the U.S. Coast Guard taking primary responsibility, and the Port, a supporting role.) The Plan has been updated annually through the City's Department of Public Health using State Funding in coordination with the Port. The most recent update was in 1995.

The Port maintains detailed records of all spills that were brought to its attention. Nine incidents have been reported and recorded for Fisherman's Wharf since 1991; two incidents in 1996 (one was a sinking fishing vessel) and both were cleaned up by the Port. Fuel spill kits at the Hyde Street Pier and Pier 46 include absorbent booms, absorbent pads, and other absorbent materials for cleanup.

With reference to the number of berths to be added in the Harbor and how the existing 116 berth spaces would be used in the future (EIR page 118, top of page), the proposed berths are designed to accommodate the larger fishing boats that currently need to side-tie or stern-tie to existing docks. This would leave space in the berths in the Inner Lagoon and Outer Lagoon for boats that are now rafted or tied to other boats in the Harbor to lease space.

The Pier 39 Harbor and Gashouse Cove pumpout facilities referred to on Page 118 (last sentence) are about 1-mile from Fisherman's Wharf in either direction.

Measures to improve existing conditions in the Harbor have been described as part of the Port's Best Management Practices (pages 165-168). The Port has also established a Fisherman's Wharf Environmental Quality Advisory Committee to provide additional input to defining measures that the Port can implement to improve water quality and Harbor supervision (see p. C&R 229).

Comment

"I ask that the Port of San Francisco commit and accept the responsibility for maintaining the highest standards of water quality attainable. I ask that the Port of San Francisco draft a realistic water quality management plan that addresses the needs of all the tenants and users of the waterfront. I ask that the Port of San Francisco take responsibility for the enforcement of such a management plan, including a budget to fund it. I ask that the Port of San Francisco cease its current practice of shifting responsibility for water quality away from itself to a completely ineffective policy of self-policing tenants. When is the last time a tenant came forward to report an environmental accident? The project proponent must take responsibility for the effects of its project. The information contained in the Draft EIR and Water Quality Study at present lacks validity to be considered comprehensive or protective of water quality." (David Zovickian, verbal comments)

Response

The Port has committed to a number of measures to improve water quality in the Hyde Street Harbor as part of the project (see EIR pp 167-168). The Port is required, under existing regulatory standards and laws, to implement measures to minimize impacts to the environment with or without the project (see EIR, p. 166). Examples include: the Oil Spill Contingency Plan (page A.39-40); remediation of hazardous waste that threatens the public health or environment

(page A.57); sediment testing and disposal procedures (page A.63) and meeting Basin Plan Water Quality Objectives (pages 42-43).

Additional measures to improve existing conditions in the Harbor have been included in the EIR, Section V, under Best Management Practices. The measures described as 'Included as Part of The Proposed Project' (page 167-168) have been committed to by the Port for implementation. This list of measures can be added to by the Port Commission as part of project approval, particularly if the Fisherman's Wharf Environmental Advisory Committee recommends other measures as suggested by the commenters above.

Comment

"The other thing I'm concerned about in the environmental report is there doesn't seem to be any idea about how things will be monitored, how consequences occur if there is some kind of a spill, is there a budget for this, who is going to do the monitoring, and what happens when something goes wrong, and how do the swimmers know about what happens, and who's doing the policing. And I think that if these kinds of issues aren't addressed -- I mean, they are not being addressed now. If you swim on any ongoing basis, you are aware that spills occur. So something in the current system isn't working, so how can you add additional development without having a system that works right now." (Laura Burtch, verbal comments)

Response

The Port's Environmental Health and Safety Section coordinates oil spill response notifications and clean-up activities. The City of San Francisco and the Port developed a San Francisco Spill Prevention and Response Plan in August 1993, which provides an incident command system in the event of a major oil spill in the Bay near San Francisco (with the U.S. Coast Guard taking primary responsibility, and the Port, a supporting role. The Plan has been updated annually through the City's Department of Public Health using State Funding in coordination with the Port. The most recent update was in 1995.

The Port maintains detailed records of all spills that were brought to attention. Nine incidents have been reported and recorded for Fisherman's Wharf since 1991; two incidents in 1996 (one was a sinking fishing vessel) and both were cleaned up by the Port. Fuel spill kits at the Hyde Street Pier and Pier 46 include absorbent booms, absorbent pads, and other absorbent materials for cleanup.

Comment

"[I]mprovements that were described to the Fishing Center do seem like very much needed improvements. So the proposal itself, I think, will be a benefit. The big question will be, obviously, the Port must have a history of being poor property managers on enforcement of the problems as what's routinely described in the Draft EIR is delegated or given to other state agencies, so it's just kind of a frustrating situation for the people who use Port properties." (Esther Y. Marks, verbal comments)

Response

The frustration apparently felt by the Aquatic Club and South End Rowing Club is highly evident by the volume of comments submitted to the City over the past several years about water quality issues in the project area. Many of the same comments that were submitted by the two Clubs in 1988 when the Port proposed a Seafood Center at Fisherman's Wharf have been resubmitted in response to the Initial Study and Draft EIR for the proposed Hyde Street Fishing Harbor/Pier 45 Sheds A & C project, and also the Draft Waterfront Land Use Plan EIR.

The EIR describes the recent improvements made to Sheds B&D, the new Harbormaster Offices on Fish Alley, the 260 gallon tank along Fish Alley for disposal of used crank-case oil, and the start of construction for the fuel tanks along Jefferson Street so that the fuel truck parked on Hyde Street Pier can be removed. These are each part of the existing setting. The EIR also describes the proposed improvements (pumpout facility, improved fuel pump station, floating berths with skirts, a restroom and oil/water separator, increased supervision) and

other measures to improve existing conditions in the Harbor that the Port assumes responsibility for. The EIR does not identify significant environmental impacts caused by the proposed project, or any of the alternatives, however, the EIR does commit the Port to at least twelve measures to improve water quality conditions in the Harbor (see pages 167-168). The Port has also established a Fisherman's Wharf Environmental Quality Advisory Committee that includes representatives from the swimming and rowing clubs and fishing industry and merchants to provide input to the development of additional measures to improve conditions and monitor their effectiveness.

Comment

"In the EIR, Section V, page 168 #12 indicates that ..."The Port will continue the weekday supervision of the harbor and will **consider** adding weekend supervision of boat activities.." This is extremely weak and is an unfortunate but accurate characterization of the Ports real attitude toward leadership/stewardship of its responsibilities. Fact is that WHARFINGER level supervision and oversight of all activities involved in this project must be maintained 24 hours a day, 7 days a week to be effective in maintaining high professional environmental standards. Most fisherman are environmentally conscious but a significant minority are not. It does not take a genius to understand that when adequate supervision is not present, abuses will occur. Currently, bilges are pumped out and other refuse from fishing boats is dumped in the inner lagoon area during "off hours" when the Wharfinger is not around. Creating a project which perpetuates this activity in the main basin and outer lagoon would set up a situation where this much was immediately transported by tidal action into the Aquatic Park Area. Totally unacceptable!!

#8 in this section also states..."The Port would coordinate with swimmers at Aquatic Park regarding scheduling of dredging activities to avoid conflict with scheduled activities..." This displays an amazing lack of understanding about how Aquatic Park is used by swimmers. For the record swimmers are in the water as early as 5 a.m. and as late 12 mid-night with heavy use

in the morning and evening but constant use all day long everyday. Does the Port expect people to stop swimming in Aquatic Park with they dredge? How long? When will the effects of the dredging cease to be a health hazard? Point #10 gives some insight into how damaging this dredging is in that the ..."Port will continue not to conduct dredging activities during herring seasons." This is very revealing. Here, there is a direct admission about the negative effects dredging has on water quality and marine life.

Lastly maintenance dredging will have to be done in the main basin and probably in the outer lagoon areas periodically after the project is finished. Estimates for the need for this activity are also ambiguous. The range is from biannual to once every 7 or 8 years. Whatever the needs turn out to be the same systems are accurate monitoring, engineering and containment controls as well as "break and "stop work" systems need to be in place prior to the commencement of this activity. The Wharfingers need to be involved in monitoring these activities as well." (Daniel Macchiarini, written comments)

Response

In response to the Port's commitment to supervision of the Harbor, the measure on page 168, No. 12 is revised to read: "The Port will continue the weekday supervision of the harbor and will add weekend supervision of boat activities".

Page 122 in the EIR describes the construction impacts that would last an estimated 5-7 days for dredging the Main Basin/Outer Harbor area for the floating berths. The Port has coordinated with the swimming club for previous maintenance dredging to schedule the construction to minimize conflicts with club events, and avoided dredging on Saturdays. The Port has also committed to field inspection during construction for visual observation of water quality, and if necessary, field sampling for turbidity. Measures that could be implemented if turbidity becomes an issue would include: silt screen or use of a suction dredge.

The reason that dredging is not done during herring season is that the Pacific herring enter the Bay primarily for spawning, with adults present in high

abundance only seasonally. Pacific herring begin to immigrate into the Bay in November, with spawning occurring from December to February. Avoiding dredging when herring are spawning makes common sense.

Finally, in response to the question about the need for maintenance dredging, it is difficult to estimate the sedimentation rate in an area because the rate is variable and fluctuates seasonally depending upon sediment load coming in from the Delta and other physical conditions in the Bay. In general, the Fisherman's Wharf area has a lower sedimentation rate than other nearby areas, such as Pier 35. The Fisherman's Wharf Inner Lagoon has only required maintenance dredging once within the last ten years to maintain its depth of 20 feet. Other Port facilities can require dredging as often as every other year. The Port's Environmental Health and Safety Section monitors dredging activities and obtains the permits and approvals from the Army Corps of Engineers, BCDC, Regional Water Quality Control Board and EPA needed prior to any dredging activities in the Bay.

Comment

"The DEIR should also identify the "Best Management Practices", (BMPs) that would be employed before, during and after construction to control and prevent polluted runoff from being discharged into the Bay. The BMPs should be consistent with those identified by the U.S. Environmental Protection Agency's "Guidance Specifying Management Measures for Sources of Non-point Source Pollution in Coastal Waters." (Joseph LaClair, written comments)

Response

The Port currently employs Best Management Practices (BMP's) in the Port facilities and tenant facilities. The practices include, but are not limited to:

- Storage of hazardous materials in enclosed or covered storage area with proper secondary containment or berms. Out side chemical storage areas are contained with berms.

- Most industrial work process areas are enclosed.
- Port vehicles and equipment are serviced regularly inside a permitted repair garage.
- Deliveries are inspected to make sure containers are intact when received.
- The Port's Environmental Staff inspects Port property weekly and picks up discarded waste oil, paint or other hazardous materials and recycles or disposes of the materials. When Class I disposal is required, a licensed hauler is used.
- The Port Environmental Staff cleans up spilled oil along the waterfront using absorbent materials. Spill kits are located near sites where spills are possible.
- Port maintenance regularly sweeps all work areas and does not wash areas with a hose.
- The Port installed a waste oil recovery shed at Fisherman's Wharf to assist fishermen in proper waste oil disposal.

The Port has initiated a group monitoring program that includes both Port-operated and tenant-operated facilities to address the monitoring requirements for both the Port's industrial activities and tenant industrial activities. The Port is working with the RWQCB to determine which tenants should be included. The group monitoring plan includes all of the industrial stormwater generating facilities located on Port property, and includes fish processing facilities.

The Port submits annual reports for Storm Water Discharges associated with industrial activities on Port properties to the RWQCB.

All of these activities will continue whether or not the project is approved and built.

Comment

“The proposed mitigation measures should be strengthened to include:

- ongoing monitoring of water quality;
- establishment of a Hyde Street Harbor/Lagoon Environmental Advisory Committee, members would include swimmers, commercial fishermen, fish handlers, Health Department, Harbormaster, Coast Guard, etc;
- repair all broken drains in the Fish Alley/Pier 45 area.

With such additional mitigation, water quality in the Aquatic area will improve and be protected in the future.(Christopher Martin, written comments)

Response

The Port has established the Fisherman’s Wharf Environmental Quality Advisory Committee to provide input to long-term monitoring of the effectiveness of improvements to existing physical conditions in the Harbor and to management and supervision of enforcement of policies and regulations. (see Section D. Staff Initiated Text Changes and Errata).

Broken drains (or clogged drains) would be identified by field inspection by the Wharfinger and Port inspector and tenants would be notified of the need to meet lease agreements for maintaining drains in working condition. Drains along Fish Alley are not part of the proposed project, however, they are discussed in the EIR under existing conditions. The Port could make the repair of drains in the project area a part of conditions of approval for the proposed project because of cumulative effects, or a part of the Best Management Practices.

Comment

1. “Fish Processing: Any level of increased discharge from fish processing into the Bay will impact swimming and rowing club activities at Aquatic Park. Although the DEIR indicates that “no discharges large enough to cause measurable water quality problems occur to the Bay from those activities”. Strict management practices should be included as a required mitigation measure. The DEIR indicates that government regulatory agencies such as state and local Health Departments inspect for sanitary conditions. To insure that fish processing activities will not further impact Bay water quality, the following mitigation measure is recommended:

PROPOSED MITIGATION MEASURE: The Port shall expand their “Best Management Practices Plan” to include additional inspection of fish processing.

2. Potential Fuel Spills and Leaks: The DEIR indicates that new docking facilities will reduce the potential for fuel spills in the Harbor. While this improvement will benefit recreational users in the Aquatic Park by reducing potential impacts to water quality from fuel spills, additional measures are needed to assure proper use of the new docking facilities.

PROPOSED MITIGATION MEASURE MODIFICATION (#2 on page 167): The Port is proposing, at some future date, installation of new facilities to minimize the potential for fuel leaks from the storage tanks to the fuel dock. These would (include) replacement of the fuel delivery pipeline from the seawall to the fuel dock that would include automatic shut-off features; a leak detection system; remote operated shutoff switch; secondary containment piping over the pipeline; and pressure-sensitive features.

PROPOSED MITIGATION MEASURE MODIFICATION (#3 ON PAGE 167): The Port is proposing an oil-water separator for the fuel dock area. Impermeable surfaces (docks and parking areas) would be designed to collect runoff in a depressed area directing stormwater to the oil-water separator prior to disposal. After oil and water has been separated, all disposal shall either be to City sewer (noncontaminated water) or to the appropriate facility (oil, contaminated water), with no discharge to the Bay.

3. Illegal waste discharge from boats: The DEIR introduces measures that, if implemented, would potentially reduce illegal waste discharge from boats. These proposed procedures include increasing Wharfinger supervision, and oversight of commercial boating and berthing activities at the proposed harbor to 24 hour/day coverage. Implementation of these measures will greatly enhance water quality protection for swimming and rowing activities in Aquatic Park area, and should be required mitigation measure in the final EIR.

PROPOSED MITIGATION MEASURE MODIFICATION (#4 on page 167): The Port is proposing a pump-out station at the fuel dock for disposal of chemical toilet waste on board boats in the harbor. The pump-out would have a capacity of 20 gallons per minute and would be connected to the City's sanitary sewer system. The proposed pump-out would reduce the likelihood of illegal discharges into the Bay. The Wharfinger would be responsible for enforcing the use of the pump-out by boaters in the harbor. Pump-out lines shall be capped during all movement to and from the boats.

4. Litter and Trash generated by Harbor Users and Visitors: The DEIR indicates that implementation of improved work skiff practices and improved coordination between the port and commercial operators and restaurant owners regarding cleaning practices would improve water quality conditions. Increased work skiff activity and improved restaurant/commercial operator housekeeping practices would have a beneficial effect on recreation uses in Aquatic Park and should be a required mitigation measure.

PROPOSED MITIGATION MEASURE: The Port shall expand their "Best Management Practices Plan" to include increased work skiff activity and improved restaurant/commercial operator housekeeping practices. It shall be the responsibility of the Port Wharfinger to verify that the skiff and housekeeping practices take place.

MITIGATION MEASURE MODIFICATION (#11, page 168): The Port will continue to coordinate with restaurant owners and nearby commercial operators to improve housekeeping practices (such as improved grease disposal bins, dumpsters with side covers, increased covered garbage receptacles, sidewalk sweeping, etc.) to reduce litter and trash entering harbor wastes.

All garbage areas shall be confined with drains and stormwater catchment flowing into the City sanitary sewer system. No runoff from garbage area will be allowed to flow into the Bay.

5. Dredging, filling and Other Construction Activities: The DEIR indicates that construction activities for the proposed project would have short-term effects on the Bay and nearby recreational facilities. Specific measures for the preservation of water quality, to be followed by the Port during all phases of construction, should be spelled out in the final EIR. In particular, construction activities effecting Bay water quality must not take place during scheduled swimming club activities.

PROPOSED MITIGATION MEASURE MODIFICATION (#8, page 168): the Port shall coordinate with the San Francisco Recreation and Park Department swimming and rowing clubs at the Aquatic Park, the National Park Service at Aquatic Park and the National Maritime Museum and BCDC regarding scheduling of dredging activities to avoid conflict with scheduled activities.

PROPOSED MITIGATION MEASURE MODIFICATION (#10, page 168): The Port will conduct dredging activities in accordance with State and Federal regulations and will avoid any dredging during herring season." (Joanne Wilson, written comments)

Response

The above measures are improvement, not mitigation measures, since there are no significant impacts. The Port has reviewed and agreed to all of the above changes described by the Recreation and Park Department with the exception of #2, connecting the oil/water separator to the City sewer system which is not feasible due to the existing collection network. The EIR is revised to reflect the above suggested changes.

Comment

"Having spoken recently with Duane Timmons of NOAA, who has most recently been installing the dopple devices in San Francisco Bay, I learned that there are various types of oil reduction/prevention booms which greatly reduce the presence of surface oils. The booms according to Mr. Timmons are relatively easy to install, but must be regularly maintained to be effective. The technology uses pads or skims.

It should be worthwhile for the Port to investigate the use and maintenance of oil reduction booms in order to keep two rather contradictory but necessary uses in harmony." (M. Toby Levine, written comments)

Response

The Port, in consultation with the Fisherman's Wharf Environmental Quality Advisory Committee, will investigate the feasibility of oil reduction / prevention booms. Their experience is that booms don't work very well and can require extensive and frequent maintenance, especially if the system involves pads and skimming. It is difficult to place the booms where they will be most helpful because the booms impede vessel traffic.

Comment

"Instead of mitigation measures the DEIR 'suggests' unenforceable 'improvement measures' which could be or have been 'voluntarily adopted' by the Port (DEIR, page 165). As stated in the DEIR, such measures include 'self policing' with the boat owners or operators responsible for reporting spills..." DEIR, page 116) and otherwise continuing current policies which have not worked. As noted in the DEIR "weekend use of the harbor is unsupervised" (DEIR, page 116) and "Port personnel has (sic) no enforcement authority and cannot write citations." (DEIR, page 116). The DEIR provides no evidence that the Port or any other agency actively enforces water quality related laws, rules and regulations. The DEIR must identify, evaluate and require

effective mitigation measures which must be included as part of the Project and as Conditions of Project approval.” (Laura Taylor, written comments)

Response

The measures required by law, described on page 166 in the EIR, are mandatory whether or not the project goes ahead. The Regional Water Quality Control Board, San Francisco Bay Region (Regional Board), is one of nine state agencies that administer the Porter-Cologne Act (State Water Code Sections 13000 et. Seq.) The nine Regional Boards each report to an actual Board whose members are appointed by the Governor. The federal government has delegated a significant portion of its enforcement and implementation responsibilities under the federal Clean Water Act to the State board, which in turn delegated these responsibilities to each of the Regional Boards. Thus, the Regional Board enforces both state and federal laws.

The Regional Board has the authority (at the staff level) to levee civil penalties for illegal discharges of waste to waters of the State under the Porter-Cologne Act. Waters of the State include surface waters such as San Francisco Bay. They can assess penalties of up to \$5,000 under State law and up to \$10,000 under federal law, per day per violation, if they choose. They can impose these penalties administratively, without a court order, but they take all penalty cases to their Board for approval.

Comment

“The EIR is unclear or ambiguous concerning what kind of monitoring system will be in place during this project. The only reference that is made to any kind of monitoring system is on Page 170 in which the "Maher" ordinance and Cal. Title 22 Regs. are cited for the purposes of disposing of dredge spoils. Direct impacts from dredge spoils on water quality are never really addressed. This needs to be spelled out in detail and "break" or "stop work" system needs to be

in place during construction operations so that if water/air quality begins to degrade, construction activity can be altered or stopped.” (Daniel Macchiarini, written comments)

Response

Commenter is confusing dredging and Maher/Title 22 issues. The Maher Ordinance contains standards for investigating and remediating contaminated **soil** within the historic tidelands of the City and is not relevant to dredging of sediments in the Bay. Title 22 contains California’s laws regulating hazardous material and hazardous waste, and it would pertain only if contamination levels in dredged material approach or exceed hazardous waste levels. Overall less than 1% of all dredged materials in San Francisco Bay exceeds Title 22 levels for a given constituent. Decisions about dredging disposal are based primarily on the results of “effects-based” biological (bioassay) test, not numerical standards as are contained in Maher/Title 22. Quality of sediment is determined **before** the project gets under way, not during. This is usually true of soils work too. Laboratory tests performed before the project begins are much more accurate and comprehensive than any of the currently available field tests for soil or water quality.

It is not possible perform any meaningful water quality monitoring during a dredging job due to the type of lab work that is involved, but the sediment quality is always well-characterized before any dredging begins to assure that no negative effects will result from the dredging. One could use a very simple test for turbidity or perform visual inspections. However, turbidity effects from dredging are very short-term and localized. It is difficult to judge the effects of turbidity outside of the immediate dredging area because the Bay is so turbid generally.

The impacts from dredging are addressed in the EIR on pages 121-122, under Construction Impacts for Water Quality, and on page 162 under Disposal of Dredged Sediments for Hazards.

The Fisherman's Wharf Environmental Quality Advisory Committee will be working with the Port staff to develop a monitoring program for the harbor.

Comment

"The Bay Plan Policies on Water Quality, in part, state that:

"Bay water pollution should be avoided. Water quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial use of the Bay as identified in the Regional Water Quality Control Board's Basin Plan. The policies, recommendations, decisions, advice and authority of the State Water Resources Control Board and the Regional Water Quality Control Board should be the basis for carrying out the Commission's water quality responsibilities. Polluted runoff from projects should be controlled by the use of Best Management Practices in order to protect the water quality and beneficial uses of the Bay, especially where a water dispersion is poor and near shell fish beds and other significant biotic resources. Approval of projects involving shoreline areas polluted with hazardous substances should be conditioned so that they will not cause harm to the public or the beneficial uses of the Bay."

(Joseph LaClair, written comments)

Response

The Port currently employs Best Management Practices (BMP's) in the Port facilities and tenant facilities. The practices include, but are not limited to:

- Storage of hazardous materials in enclosed or covered storage area with proper secondary containment or berms. Out side chemical storage areas are contained with berms.
- Most industrial work process areas are enclosed.

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5. Mitigation

- Port vehicles and equipment are serviced regularly inside a permitted repair garage.
- Deliveries are inspected to make sure containers are intact when received.
- The Port's Environmental Staff inspects Port property weekly and picks up discarded waste oil, paint or other hazardous materials and recycles or disposes of the materials. When Class I disposal is required, a licensed hauler is used.
- The Port Environmental Staff cleans up spilled oil along the waterfront using absorbent materials. Spill kits are located near sites where spills are possible.
- Port maintenance regularly sweeps all work areas and does not wash areas with a hose.
- The Port installed a waste oil recovery shed at Fisherman's Wharf to assist fishermen in proper waste oil disposal.

The Port has initiated a group monitoring program that includes both Port-operated and tenant-operated facilities to address the monitoring requirements for both the Port's industrial activities and tenant industrial activities. The Port is working with the RWQCB to determine which tenants should be included. The group monitoring plan includes all of the industrial stormwater generating facilities located on Port property, and includes fish processing facilities.

The Port submits annual reports for Storm Water Discharges associated with industrial activities on Port properties to the RWQCB.

All of these activities will continue whether or not the proposed project is approved and built.

6. ALTERNATIVES

a. Another Location

Comment

"As I drive through Jefferson Street to get to the club at 6:00 o'clock in the morning, it's choked with big fishing trucks that have fish on them. But they are not from this area; they are from Portland, Oregon, they are from all over the place. You could have a fish processing plant in Modesto, you don't need it down there." (John Rohosky, verbal comments)

"We must stop any expansion of facilities for commercial fishermen next to Aquatic Park and look to alternate areas in our bay for development of commercial facilities for fishermen, if indeed, there is a need for expansion. If there is a need for expansion, they can go some place else. There are empty piers further down the Embarcadero, and that area is seeing new development, with the new Giants stadium going in." (W. Sijssling, written comments)

"Please turn this around for the people. More piers and water access ways are opening up around the Embarcadero - can't you please find another place for a marina? There must be other options than Aquatic Park. Please make amends." (Leslie Anglim, written comments)

"It seems that the DEIR is actually describing two separate projects, and perhaps they should be considered separately: 1) whether to add 60 new boat berths, and 2) what to do with pier 45. There is room for boat berths at other less-congested piers; alternatives to Hyde St. should be sought." (J. Irving, written comments)

"The DEIR fails to identify a "range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basis objectives of the project but would avoid or substantially lessen any of the significant effects of the project" (§15126(d), CEQA Guidelines). The only alternative presented in the DEIR to the Hyde Street Fishing Harbor portion of the Project is a larger project. No alternative sites are discussed in any manner. No

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6. Alternatives

a. Another Location

alternatives other than the preferred alternative which might meet the basic objectives of the project but which cause less environmental impact are discussed in any manner. The Initial Study indicates that an array of alternatives will be formulated and analyzed but the DEIR fails to follow through on its commitment.” (David Behar, written comments)

“The DEIR fails to identify a "range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project (Section 15126(d), CEQA Guidelines). The only alternative presented in the DEIR to the Hyde Street Fishing Harbor portion of the Project is a larger project.” (Incidentally, no alternative to the Pier 45 Sheds A and C are identified -- mere alternative uses of the space are not the "range' of alternatives that CEQA intended.) No alternative sites are discussed in any manner. No alternatives which might meet the basic objectives of the project (other than the preferred alternative) but cause less environmental impact are discussed in any manner. The Initial Study indicated that any array of alternatives would be formulated and analyzed, but the DEIR fails to follow through on this commitment.” (Linda M. Sheehan, written comments)

“There is at least 10 linear miles of wharfside property that could be developed where they could have fishing boats that could have all of this processing. Why, I ask, does it have to be in this one little corner?” (John Rohosky, verbal comments)

“Finally, the analysis of alternatives to the proposed project is inadequate and does not meet the minimum requirements of CEQA. No alternative sites are identified despite CEQA requirements and the promise that such will be done. Alternatives with a lesser environmental impact are not considered. In fact, the EIR threatens to build reliance on the DEIR, even though environmental impacts of such project are not the focus of the DEIR.” (Aaron Peskin, verbal comments)

“The Initial Study promised that the DEIR would consider at least one alternative site for the project. Certainly, there are a variety of locations with the Port's jurisdiction which could be considered to accommodate the additional berths for commercial fishing vessels. Yet contrary to

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6. Alternatives

a. Another Location

the promise in the Initial Study, the DEIR does not give any consideration to any alternative site.”

(Margaret Reilly and Roger Beers, written comments)

Response

In response to the first comment, much of the seafood product delivered on Jefferson Street does not go to the fish processors on Pier 45, but are deliveries that are picked up by restaurants, retailers and wholesalers from outside the area (truck to truck activities as shown on page 13, Figure 4 of the EIR).

Nevertheless, while a large amount of seafood product (an estimated 50%) is delivered to the fish processors by truck, about 50% is still delivered by boat which requires processors to have water access.

In response to the question about ‘why this location’, Fisherman’s Wharf has been the traditional home of the fishing industry for almost 100 years. Fishing boats were using the Harbor long (about 38 years) before the swimming and rowing clubs selected to move their clubhouses to Aquatic Park. (see pages 4-9 in the EIR) San Francisco is recognized as one of the major West Coast Ports for the landing and distribution of seafood products with close proximity to major seafood markets. Located at the entrance to San Francisco Bay, fishermen save time and fuel costs in reaching fishing grounds, and can reach and enter the harbor in a timely manner when weather conditions are threatening. There are already 116 berths for fishing boats and roughly 150,000 square feet of fish processing space on Pier 45 and in Fish Alley, along with a fuel dock and ice machine also located in the Harbor that serves the fishing industry.

In accordance with CEQA Guidelines (Section 15126(d)) the EIR must include a “range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would

avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.”

In terms of alternative locations, CEQA guidelines state “The key question and first step in analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR”.(Section 15126 (d)(5)(B)1.)

No significant impacts from the proposed project are identified in the EIR, thus, under CEQA, no alternative locations need to be considered in the EIR. The project would improve existing conditions in the Harbor and would add increased management and supervision of commercial fishing activities. Locating berths for fishing boats several miles away (at China Basin) from existing fish processing facilities, and major restaurants and the entrance to the Bay would not be prudent or reasonable.

In response to comments about the Initial Study: the proposed project at the time of the Initial Study was the 88-berth Harbor, a two-story harbormaster building on Hyde Street Pier, and a new fueling facility and expanded parking. The Port reconsidered the size of the Harbor in response to comments on the Initial Study and information assembled for defining the objectives of the project. The smaller 60-boat harbor was selected by the Port as the preferred project. The EIR includes the original design for the harbor as an Alternative in the EIR so that impacts can be compared with the smaller harbor design. The comment’s suggestion that the Port analyze an alternative project that would improve the existing harbor facilities without the construction of new berths would not be environmentally superior to the proposed project since the proposed project would not have any significant environmental impacts. In addition, such alternative fails to meet the

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6. Alternatives

a. Another Location

project objectives because it would not provide modern, sanitary berthing facilities suitable for a center for the commercial fishing industry. The current berthing facilities lack suitable water, and electrical power and are accessible only by ladders.

In response to the comments about the relationship of the proposed harbor expansion and Pier 45 Sheds A&C; the EIR includes both projects because they are in the project area and are proposed by the same applicant and are directly related to the commercial fishing industry. Even though the Port is less certain about what might ultimately be developed in Sheds A&C (because of funding availability and reaching consensus with the Pier 45 Advisory Group), the City (OER) recommended including the Pier 45 Sheds A&C design concepts in the EIR to avoid a 'piecemeal' analysis with two separate environmental documents.

Comment

"The Initial Study prepared by the City Planning Department reflects an understanding of the kind of alternatives that are required to be analyzed in this DEIR in order to comply with CEQA. It committed a minimum to the following:

"At a minimum, alternatives analyzed will include the following:

- "- The No Project Alternative.
- An alternative designed with fewer berths and less parking and fewer new uses in the sheds on Pier 45.
- Alternative Sites..." (DEIR, page A-25)

Alternative site(s). An evaluation of whether alternative sites for certain portions of the project are feasible will be provided. Such sites may include building new facilities at an alternative location. The extent to which utilization of other sites

could mitigate any significant environmental impacts will be discussed." DEIR, Appendix A. at A-25." (Margaret Reilly and Roger Beers, written comments)

"The Initial Study for the project recognizes the types of alternatives required to be analyzed in the DEIR in compliance with CEQA and states that "at a minimum" the following alternatives would be analyzed in the DEIR:

"- The No Project Alternative.

- An alternative designed with fewer berths and less parking and fewer new uses and the sheds on Pier 45.
- Alternative Sites..." (DEIR, page A-25). "(Laura Taylor, written comments)

Response

CEQA Guidelines Section 15126(d) requires that EIR to describe a range of reasonable alternatives to the Project, or to the location of the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Subsection 15126(d) (1) specifically states that the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly. In addition to the proposed project, the EIR analyzes the "no project" alternative, as well as two more intensive project alternatives. The EIR does not identify any significant impacts resulting from either the proposed project or the more intensive alternatives. As a result, an analysis of alternative sites or projects to the propose project as suggested by the comment would not meet the purposes of CEQA and is not required. This is because such analysis would not provide the decision makers with meaningful alternatives lessening the significant effects of the project. It would merely offer the decision makers an

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6. Alternatives

a. Another Location

alternative that would not meet the project objectives, and would not offer any environmental superiority over the proposed project. CEQA does not demand an analysis of alternatives that would improve the existing environment where the project does not create any significant impacts. Nevertheless, review of the “no project” alternative indicates that the proposed project would clearly have a beneficial impact upon the existing environment. The comment’s suggestion that the Port analyze an alternative project that would improve the existing harbor facilities without the construction of new berths would not be environmentally superior to the proposed project since the proposed project would not have any significant environmental impacts.

b. No Project

Comment

“The “no project” alternative is not an alternative of “lesser development” since it does not involve any proposed development at all. The “no project” alternative standing alone – without any intermediate choices – cannot present “information sufficient to permit a reasonable choice of alternatives.

Yet, contrary to the promise in the Initial Study, the DEIR does [not?] give any consideration to any alternative site.

This is clearly a violation of CEQA, and itself requires that the DEIR be revised and recirculated.” (Margaret Reilly and Roger Beers, written comments)

Response

CEQA does not demand an analysis of alternatives that would improve the existing environment where the project does not create any significant impacts. Nevertheless, review of the “no project” alternative indicates that the proposed project would clearly have a beneficial impact upon the existing environment

In response to the comment about the Initial Study: the proposed project at the time of the Initial Study was the 88-berth Harbor, a two-story harbormaster building on Hyde Street Pier, and a new fueling facility and expanded parking. The Port reconsidered the size of the Harbor in response to comments on the Initial Study and information assembled for defining the objectives of the project. The smaller 60-boat harbor was selected by the Port as the preferred project for the EIR. The EIR includes the original design for the harbor as an Alternative in the EIR so that impacts can be compared with the smaller harbor design.

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b. No Project

Recirculation of the EIR is not required (CEQA Section 15088.5) unless “a feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project’s proponents decline to adopt it.” (a)(3.) The Final EIR includes expanded clarification for the no project alternative and revised designs for Sheds A&C and the floating harbor, in response to comments from the fishing industry representatives and Pier 45 Advisory Group. The EIR includes information for a larger project (originally proposed) and the downsized harbor (the preferred project) and an alternative harbor layout that provides more space in the Main Basin for boat access to Pier 45. No new significant impacts have been identified for any of the alternatives added or revised since the Draft EIR was circulated for public review.

Comment

“At the hearing I indicated that the No Project Alternative needs substantial modification to show what rotten conditions will continue if project does not go forward and Port continues to operate in same manner.” (Sue C. Hestor, written comments)

Response

The No Project Alternative discussion has been augmented with information from the setting and project objectives sections that discuss needed improvements and existing conditions in the Harbor.(see page 177)

c. Fewer Improvements

Comment

"The DEIR's failure to consider any alternative with lesser environmental impacts violates CEQA.

The EIR's failure to consider a lower intensity of development violates CEQA." (Margaret Reilly and Roger Beers, written comments)

"To what extent is such a need driving the Project for new, expanded berthing based on undemonstrated need? Why doesn't the DEIR include consideration of an alternative that would improve existing harbor service facilities (pump out facilities, restrooms, fuel spill containment equipment, etc.) without expanding the harbor?

Except for the "no project alternative" the DEIR contains none of these alternatives. No alternative sites for the proposed Project are analyzed in site of approximately 10 miles of waterfront. No alternatives are analyzed with fewer berths or less parking or fewer new uses in the sheds. no alternatives are analyzed that would lessen or improve water quality impacts. As pointed out in Part III.A(3) above, why doesn't the DEIR analyze an alternative project that would improve the existing harbor facilities for the commercial fishing industry without the construction of new berths? (Laura Taylor, written comments)

"The DEIR affords no opportunity to see how the Port's needs and the environmental harms posed by the project could be balanced in some compromise alternative that would allow some new construction, but not the entire amount of new construction contemplated in the proposed project.

No alternative analyzes either fewer berths or less parking or fewer new uses in the sheds. Nor does any alternative analyze any alternative site for the project. Instead the DEIR analyzes alternatives the represent either *more development* than the proposed project or simply different

configurations of the interior uses of the sheds. All of these alternatives have impacts that are greater than the proposed project. Yet, not a single alternative in the DEIR takes a look at scaling down the proposed new construction to attempt to mitigate environmental impacts.” (Margaret Reilly and Roger Beers, written comments)

Response

A no project alternative which would not expand the harbor was considered in the DEIR, but without the pump out and restrooms being built. The comment’s suggestion that the Port analyze an alternative project that would improve the existing harbor facilities without the construction of new berths would not be environmentally superior to the proposed project since the proposed project would not have any significant environmental impacts. In addition, such alternative fails to meet the project objectives because it would not provide modern, sanitary berthing facilities suitable for a center for the commercial fishing industry. The current berthing facilities lack suitable water and , electrical power and are accessible only by ladders.

CEQA Guidelines Section 15126(d) requires that EIR to describe a range of reasonable alternatives to the Project, or to the location of the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Subsection 15126(d) (1) specifically states that the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly. In addition to the proposed project, the EIR analyzes the “no project” alternative, as well as two more intensive project alternatives. The EIR does not identify any significant impacts resulting from either the proposed project or the more intensive alternatives. As a result, an analysis of alternative

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c. Fewer Improvements

sites or projects to the propose project as suggested by the comment would not meet the purposes of CEQA and is not required. This is because such analysis would not provide the decision makers with meaningful alternatives lessening the significant effects of the project. It would merely offer the decision makers an alternative that would not meet the project objectives.

d. Maximum Expansion

Comment

“Instead, the DEIR analyzes “The Maximum Expansion alternative” (DEIR, pages 177-181) to accommodate at least 60 more boats than the proposed project – an alternative that would have an even greater environmental impact than the proposed Project. Even the Port admits that this alternative “is not now considered reasonable.” (DEIR, page 177). Yet, it appears that this alternative is included in an attempt to cover any future expansion of the harbor under this EIR even though the environmental impacts of such a larger project are in no way adequately considered in this DEIR. ” (Laura Taylor, written comments)

Response

The focus of analysis for the Hyde Street Fishing Harbor, Maximum Expansion Alternative was on the differences in the physical changes between this alternative and the proposed 60-boat Harbor. Thus, Bay Fill and Bay Cover information comparing the two harbor design is included to meet BCDC review requirements; traffic and parking differences were analyzed and no substantial differences were identified; water quality conditions and impacts were assessed and it was concluded that water quality would be expected to remain similar to existing conditions and potential impacts would not differ from those discussed for the proposed project.

e. Pier 45

Comment

“As to the Pier 45 Sheds A & C, instead of analyzing a project with fewer uses the DEIR simply discusses different configurations of internal uses without addressing any of the environmental concerns of this aspect of the Project. CEQA requires that a DEIR consider project alternatives with a lesser environmental impact and that it consider alternative sites.” (Laura Taylor, written comments)

Response

The No Project Alternative, addressed in the EIR, includes fewer uses than the proposed project and alternatives. No significant impacts are identified for any of the use scenarios analyzed in the EIR, therefore, CEQA does not require an alternative with fewer improvements to the sheds, or an alternative that would be located at another site. Additionally, an alternative location would not meet the objective to make interior improvements to the sheds and Pier 45 uses.

Comment

“We urge you to amend the Draft EIR and the proposed alternatives to reflect the current and future operations of the NMMA at Pier 45.” (Kathy Lohan, written comments)

Response

The EIR text has been revised (pages 181, 185) to add the 10,000 sq. ft. for the Pampanito on the east side of Shed A.

Comment

“I must take issue with the proposed alternatives for Pier 45 Shed A and C which are referred to throughout the EIR and are described in detail in Section C of the Project Description and

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e. Pier 45

Section VII, Alternatives to the Proposed Project. Three alternatives (Alternatives (A-C) are described which seem to be based upon the previously mentioned Sedway feasibility study completed for the Port in 1994 using grant funding from National Oceanic and Atmospheric Administration (hereafter "Sedway Study"). The stated objective of the Project Sponsor is "to provide complementary uses to the fishing industry," yet none of these alternatives consider commercial fishing industry uses such as fish handling and gear storage in Sheds A and C, which certainly must be considered as the most complementary use to the fishing industry.

In 1988 the Port Commission adopted a development plan for the revitalization of the commercial fishing industry at Fisherman's Wharf (Resolution 8-43), under which "Shed C will be renovated and seismically braced to provide 29,200 square feet of fish handling space, 14,700 square feet of fisherman's gear storage, and a 14,000 square feet footprint of the fisheries Institute. (This plan was also entered into the Congressional Record by Congresswoman Nancy Pelosi.) Since this Port Resolution has not been rescinded nor modified, and since this development plan has been presented to State and Federal agencies for funding and support, it must still be construed to be the Project Sponsor's preferred alternative for Sheds A and C. The final EIR should study the above mentioned as an additional development alternative for Shed C."(Christopher Martin, written comments)

Response

The Port has submitted an alternative for Sheds A&C, (see pages 232-236 of C&R) that was suggested by the Pier 45 Advisory Group. This alternative includes 32,000 sq. ft. of fish processing space and space for fishing gear storage, and parking for employees of fish processing businesses on Pier 45.

7. COMMENTS ON INITIAL STUDY

Comment

“However, the Initial Study now dismisses this added noise because a study prepared on the earlier proposal concluded that it “could barely be perceived.” (p. 13). No conclusion was drawn about project noise impacts on the nearest and potentially most sensitive receptors of this noise – those people swimming in nearby Aquatic Park. In addition, the Initial Study does admit that construction activities would generate noticeable increases in noise levels within Aquatic Park, (p. 18). For each of these reasons, the Project clearly has the potential to produce significant noise impacts which should be review in the EIR.” (Margaret Reilly and Roger Beers, written comments)

Response

The Fisherman’s Wharf Seafood Center Noise Report prepared by Bendix Environmental Research, August 4, 1996 was the basis for focusing noise out of the EIR. It analyzed potential noise affects from the larger harbor and operation of modernized facilities as well as from construction noise. The findings were that there would be no substantial increase in noise from boat and vehicle traffic beyond the existing situation. Construction noise would occur far from most sensitive receptors and for a brief period of time. The noise impacts on swimmers were not considered in that they enter and pass through Aquatic park water intermittently (which often does not coincide with the normal time for construction activities to be underway) and have a very brief period of “residency” in proximity to the construction activities.

Comment

“These Scoping comments are being re-submitted as part of our comments on the DEIR because the Scoping Comments were largely ignored in the DEIR, and much of the Scoping Comments’

information and analysis remain applicable to the project in its current configuration and are not repeated in the above comments on the DEIR.” (Roger Beers, written comments)

Response

The EIR did not ignore the commenters response to the Initial Study. The comments were used by the EIR consultants to scope the study effort and water quality sampling plan. The technical reports for water quality, hazards, and traffic each include detailed information responsive to the detailed comments provided to guide the EIR review.

Comment

“Many of the assumptions made in the Initial Study will now have to be reexamined, if the Project is now being redefined.” (Margaret Reilly and Roger Beers, written comments)

Response

The proposed project described in the EIR is the project analyzed. The Initial Study was developed in 1988, the EIR presents the updated project description, and the analysis of potential environmental impacts is based on the most recent project description. The Initial Study is included as an appendix in the EIR as background information only, and the results of the environmental review in the EIR are intended to replace any results of the Initial Study.

The project as proposed is a smaller and less intense project than what was examined in the Initial Study. Any effects on the environment would also be scaled down.

Comment

“We must also point out that according to CEQA Guidelines (§15153 (a)), a single EIR may be employed to describe more than one project only if such project are essentially the same in terms

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of their environmental impacts. Regardless of the vagueness and inadequacy of the Project description(s) in the subject DEIR, the two projects that it attempts to analyze (the Harbor Expansion and Pier 45 Sheds A & C) are so different in terms of their project specific environmental impacts as to be impossible to analyze in the same document. This provision of CEQA does not, however, preclude the requirement to consider the cumulative impacts of the Project in the context of other past, currently proposed and anticipated projects in the area.”
(Laura Taylor, written comments)

Response

The EIR includes both projects because they are in the same project area and are proposed by the same applicant and are directly related to the commercial fishing industry. Even though the Port is less certain about what might ultimately be developed in Sheds A&C (because of funding availability and reaching consensus with the Pier 45 Advisory Group), the City (OER) recommended including the Pier 45 Sheds A&C design concepts in the EIR to avoid a ‘piecemeal’ analysis with two separate environmental documents

Comment

“Our ability to comment, and presumably that of others who might have wanted to comment, is limited by short notice period given at a time of year when holiday plans and travel schedules leave little available time to devote to “surprises.” This has occurred despite the fact that the Initial Study was issued on July 8, 1994 for the Project, and comments on the Initial Study were apparently solicited from *public agencies* at that time but not from the many members of the public who have previously expressed an interest in the Project. We believe that the comment period should be extended for an additional thirty days, because of the delay that has occurred in the sending of the notice to members of the public and the short period allowed for public comment during the holiday season.” (Margaret Reilly and Roger Beers, written comments)

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7. Comments On Initial Study

Response

The original mailing of the Initial Study was, in fact, in July of 1994. The mailing list included the commentors. In response to their request for another opportunity for comments to be submitted, the Office of Environmental Review did issue a second notice of preparation and request for comments on December 1, 1994.

The second response period closed on December 31, 1994.

Comment

“On November 29, 1994, the City planning Department issued a Notice that an Environmental Impact Report is Determined to be Required regarding the Port's proposed Waterfront Plan, and soliciting comments thereon. However, there is no mention in that document of the fact that the City was contemporaneously issuing a similar notice for public comments on the instant Project. Nor does the Notice that was issued for the Project contain any reference to the proposed Waterfront Plan or the fact that an EIR is being done. Clearly, there is no reason for these two ships to be passing in the night.” (Margaret Reilly and Roger Beers, written comments)

Response

The Hyde Street Fishing Harbor/Pier 45 Sheds A and C DEIR analyzes a specific project. The Waterfront Land Use Plan DEIR is a programmatic document that is general in nature, allowing consideration of broad policy alternatives and program wide mitigation measures at an early time when greater flexibility exists to deal with basic issues and cumulative effects. Thus, they are separate projects and there would be no reason for either notice to mention the other project.

Comment

“Similarly, the notice that went out soliciting public comment on the project needs to be resubmitted with a revised Initial Study that makes clear that the scope of the project now includes recreational boating. Overall, some certain, permanent definition of the project in this

regard should be developed for inclusion in a new solicitation to the public for comments.”

(Margaret Reilly and Roger Beers, written comments)

Response

The EIR addresses “activities associated with boating, whether commercial or recreational, that can potentially affect water quality” (page 115 of the EIR). There is no need to revise the Initial study or EIR.

Comment

“The Initial Study incorrectly finds that the project could not disrupt or adversely affect a property of historic or cultural significance or conflict with the preservation of historic buildings (DEIR, page A-22). As a result the DEIR contains no discussion of the Project's potential impacts on numerous existing historic resources to be moved, altered, demolished or otherwise affected by the Project.” (Laura Taylor, written comments)

Response

The EIR includes information on historic property and archaeological resources on page 171, under Mitigation Measures for construction activities. Information about the SF Maritime Historical Park has been added to the EIR (page 40) to address adjacent land use of historic significance. An architectural evaluation of the building at 490 Jefferson Street (Bell Smoked Fish Building) was conducted for the EIR by a certified architectural historian (Ward Hill) and it was concluded that the building was not eligible for the national Register of Historic Places due to a loss of integrity. (see project file 94.574E.)

Comment

“The Initial Study provides a vague, incomplete and, in some cases, incorrect description of the project. By its terms, the Initial study proposes an ever shifting project description, to be defined through the EIR process. (Margaret Reilly and Roger Beers, written comments)

“In other respects the environmental review process for the project is flawed. Section and paragraph references below refer to portions of the Initial Study.

- A. Section IV, Par B1b - Land Use. The proposed project could have a substantial impact on the existing character of the vicinity.
- B. Section IV, Par B3a - Population Growth. The project could induce substantial permitted increases in vessel “live aboard” populations.
- C. Section Iv, Par B4c and d - Transit Demand and Parking. Foreseeable changes in parking and traffic circulation on Jefferson Street and the foot of Van Ness will negatively impact elderly who are entitled to protections of ADA.
- D. Section IV, Par B9b - Topography. The addition of .54 acres of new Bay fill, and the new fill represented by the proposed Hyde Street Harbor berths, constitutes a substantial change in topography and in a unique physical feature of the site.
- E. Section Iv, Par 10a and c - Water. The Eir should examine the extent to which the Bay fill associated with this project may create or change siltation patterns and may affect water quality.
- F. Section IV, par 11B - Potential Use of Natural Resource. The City Recreation and parks Department’s entire Bay swimming program depends on water quality in Aquatic park suitable for human contact. If the project degrades water quality, uses of the water resources in Aquatic Park for swimming purposes would be lost. The Eir must address this potential loss of use.

- G. Section IV, Par 13 - Cultural. In existence for well over 100 years, the two swimming and boating clubs and the programs they carry out are historic and cultural resources of significance to the community. Significantly degraded water quality in Aquatic Park would likely result in economic ruin of both clubs and loss of the cultural and historic resource that both provide. This potential loss must be address in the EIR.
- H. Section IV Par D - Mitigation Measures proposed. The scope of mitigation measures ultimately imposed must take into consideration the future water quality problems that based on historic data and practices, could foreseeable arise from operating and maintenance aspect of the project including activities of tenants and visitor on Pier 45 and on vessels, docks and berthing areas.”(Margaret Reilly and Roger Beers, written comments)

Response

The above comments are on the Initial Study, not on the EIR. The Initial Study reflected the project as it was known at the time. As is frequently the case, during the preparation of the EIR the project was further defined, and in this case, “downsized”. All aspects of the project as it is now defined were analyzed in the EIR.

Comment

“In addition, the Initial Study notes that expanded berthing and parking facilities will predictably increase the volume of sea food landing and handling, but fails to quantify the increase, apparently due to the Port's failure to supply any baseline data on the current volume of seafood handling in the project area. We understand that the only data currently available relates to quantity of fish "landed", and that no data is kept on the quantify of seafood processed or handled.

The Initial Study implies that the existing commercial fishing fleet in Fisherman's Wharf is overcrowded. With only 99 existing berths, it would appear that currently, 21 vessels are "doubled stacked" and 50 vessels are rafted up without assigned berths. One might assume from

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this that the 71 "homeless" vessels would rush to occupy the new 86 berths and 1320 linear feet of new dock space. ”

“The Initial Study is confusing in its treatment of fish handling and processing activities in the area in relationship to this Project. On the one hand, the Project Description includes Sheds A *through* D on Pier 45, where fish handling and processing have been done in the past and are now proposed to be expanded. (A.4). Yet, the Project Description contains no mention of these activities in relation to this Project. Elsewhere, the Initial Study refers to the "potential increase in truck traffic *related to the fish handling business could be an outcome of the project*" (A. 17), and also promises that the EIR will consider the topic of odors from "fish processing activities on Pier 45. (A. 19). When the earlier project was proposed, the Negative Declaration acknowledge that it would result in increases in "fish handling" which will result in a corresponding increase in the amount of fish wastes generated. The fact that the Port chose to bite off a piece of that project to be treated for emergency seismic repairs - on the basis of a negative declaration - should not be a basis for now escaping review of the impacts of the fish handling and processing businesses in the area where this project is proposed, and how the remainder of the project relates to those activities. (Margaret Reilly and Roger Beers, written comments)

“It is unclear what “Project” is being considered in the DEIR for Sheds A & C. Fish processing, although it would appear to meet the state project objective, is never mentioned in the Initial Study or in the DEIR’s rambling discussion of the “Project”. CEQA clearly requires the project to be reasonable defined before it can be adequately considered in the DEIR (CEQA Guidelines, §15124).

“The Initial Study variously describes the proposed project for the Sheds A & C as a “Fisheries Institute...which *may**(**emphasis added*) include *some** retail, parking, office and public service space (DEIR, page A-3) and as a “Center...for the following uses: applied research; a small conference center; education and training for members of the fishing industry; backup facilities and training for members of the fishing industry; backup facilities for *Underwater world*; office; retail; parking. (DEIR, page A-4). Alternatives are described in the Initial Study as “a Visitor

Center” and “an adjunct tank/research facility to *Underwater World Aquarium.*”. (Laura Taylor, written comments)

Response

The three comments above are comments on the Initial Study (Appendix A of the EIR) completed for the proposed project in 1994 to determine the focus of the EIR. Between the time that the Initial Study was prepared (May 1994) and the time that the DEIR was published (April, 1996) the Port made several adjustments to the proposed project, partly in response to input from the Pier 45 Advisory Group and partly in response to comments received from public agencies and community groups on the Initial Study.

The main difference in the Project Description in the Initial Study and what was proposed in the EIR is the size of the Hyde Street Fishing Harbor. The original Harbor was for 116 boats, and included a new two-story, 4,100 sq. ft. Harbormaster building, and a new 1500 sq.ft. fuel station building on Hyde Street pier and on new fill. The main differences between what was originally proposed at the time of the Initial Study for Pier 45 Sheds A & C and what is described in the EIR is the elimination of backup facilities for Underwater World and adjustments to the space allocated to the conference center and retail uses. The potential 30,000 sq. ft. of space in Sheds B & D for Fisheries Center use has been eliminated from the proposed project description because the sheds are 90% leased for fish processing/handling and this use has priority over other potential public uses of the sheds.

The EIR includes a discussion of activities (fish processing/handling) in Sheds B & D as part of the setting sections for land use, water quality, traffic and parking because of the relevance to the adjacent proposed uses for Sheds A & C. These uses are also considered in the EIR as part of the cumulative analysis (see page 139 in the EIR for future traffic conditions).

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Finally, in response to the Initial Study identification of odor from fish processing as an EIR topic: pages 130-132 of the EIR discusses odor from fish processing, not because fish processing was part of the proposed project, but because the proposed improvements to the Harbor are associated with fish processing activities (for example: the Harbor improvements are directed to improved facilities used by commercial fishing boats that are in the harbor, in part, to deliver to the processing/handling businesses on Pier 45).

Comment

“Attachment C Critique of Water Quality Report, dated November 29, 1989, prepared by Bendix Environmental Research, Inc.” (Margaret Reilly and Roger Beers, written comments)

Response

The Bendix report, although reviewed, was not used as a basis for this EIR. Therefore, responses to comments on the referenced report are not relevant to this EIR.

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8. COMMENTS ON PREVIOUS NEGATIVE DECLARATION

Comment

"No surface Water Samples Were Taken.

In the Dolphin Club's Scoping Comments we called specific attention to the fact that the Bendix study had failed to do any testing for surface water, obviously that area most likely ingested and in contact with swimmers." (Margaret Reilly and Roger Beers, written comments)

"No mention is made of the increased sources of human waste that will be now located next to Aquatic Park if the Project proceeds. The earlier Negative Declaration admitted that disposal of human wastes in the Bay is currently a problem, but failed to quantify the amount of additional wastes of this nature that were likely to be generated by the proposed Project.

It simply asserted that the provision of sanitary facilities will make appropriate disposal "possible" and relied on the assumption that regulations which are not currently being enforced will be enforced in the future. While it may be reasonable to assume that such facilities will be utilized to some degree, it is not reasonable to assume, as the Negative Declaration did, that this will eliminate the incremental impact of the Project -- particularly given the increase in number of fishing boats and activities and their proximity to Aquatic Park. The agency has not taken into account the degree to which the Project will itself contribute to increased generation of human wastes. Moreover, the 75% net decrease that the Negative Declaration asserted will be attributable to the Project was based on the arbitrary assumption that the new facilities associated with the project would produce a 50% reduction and "improved enforcement" would produce a 25% reduction, and again did not take into account that some of the primary sources of this pollution would be sited closer to Aquatic Park. Water Quality Report at 35. No justification whatsoever was provided for these figures. Moreover, how could this type of "net reduction be calculated when at no point did the City or its consultant calculate the amount of new waste attributable to the Project? In addition, the Negative Declaration failed to specify the regulations that it relied upon, or the basis for assuming that these regulations would be enforced in the face

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of the fact that the Port's enforcement record to date has been abysmal. (Margaret Reilly and Roger Beers, written comments)

Response

The above comments are resubmitted comments that were made on the previous 1988 Negative Declaration for the Fisheries Center, not on this EIR for the Hyde Street Fishing Harbor/Pier 45 Sheds A&C. Similarly, the reference to the page 35 in the Water Quality Report is to a previous study conducted by Bendix Environmental Research. Information in this EIR shows bacteria levels in Aquatic Park below the Basin Plan criteria for water contact recreation use. The EIR does not assume a substantial increase in the number of boats in the Harbor over the historic use for the past decade, nor does this EIR assume a percentage reduction of human waste because of project improvements in the Harbor.

Comment

"Both the Negative Declaration and the Water Quality Report acknowledged that the project will generate additional "floatables" (which already present a pollution problem), but again asserted without quantification or analysis that the project components designed to mitigate this problem will be fully effective." (Margaret Reilly and Roger Beers, written comments)

Response

The above comment is not on the EIR. The comment is on the previous Negative Declaration; however the comment was resubmitted by the commentors for this EIR. Litter and trash impacts are discussed in the EIR on page 120-121, and also under Other Wastes From Boats on page 118. Because boats are not the only potential source of litter and trash in the Bay (some is blown in from visitor areas adjacent to the project area and some is carried into the Harbor by seagulls), quantification of the potential volume of litter and trash from boats using the new Harbor or Pier 45 Sheds A&C is not possible. The Port is committing to

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increased operation of the work skiff in the harbor from one time daily to twice daily to reduce the amount of floatables in the Harbor. Additionally, the floating boom and flexible skirts on the proposed Harbor docks would contain floatables in the Harbor and prevent them from moving into Aquatic Park.

D. STAFF INITIATED TEXT CHANGES AND ERRATA

1. ESTABLISHMENT OF FISHERMAN'S WHARF ENVIRONMENTAL QUALITY ADVISORY COMMITTEE

Between the time that the Draft EIR was published (April 26, 1996) and the publication of this Final EIR, the Port established the Fisherman's Wharf Environmental Quality Advisory Committee to provide a mechanism for achieving the goal of improving the quality of the existing environment in Fisherman's Wharf/Aquatic Park. The Committee will provide input to the Port on a continuing basis for identifying problem areas and developing recommendations to improve existing conditions in the Fisherman's Wharf/Aquatic Park area.

The Port has provided a staff member, the Environmental Health and Safety Manager, to organize and chair the Committee. The Port will also retain a technical advisor to advise the Committee on water quality issues. The Port has provided funding to the Committee to be used in the development of an environmental quality plan and set of recommendations for action. It is the intent of the Port to fund this Committee as an on-going activity and not a one-time event.

The Committee is composed of representatives of the variety of interested parties in the Fisherman's Wharf area that includes industrial, retail and recreational activities.

Representatives on the Fisherman's Wharf Environmental Quality Advisory Committee are:

Alessandro Baccari, Fisherman's Wharf Merchant's Association

Jeanette Caito, Caito Fisheries

Tom Creedon, Port Tenants Merchant's Association

Lynn Cullivan, SF Maritime National Historic Park

Summary of Comments and Responses
D. Staff Initiated Text Changes and Errata
I. Establishment of Fisherman's Wharf EQAC

Bob Miller, SF Boat Owner's Association

Aaron Peskin, South End Rowing Club

Tim Przygocki, SF Maritime National Historic Park

Margaret Reilly, Dolphin Club

Joel Robinson, SF Recreation and Parks Department

Jim Salerno, SF Bureau of Water Pollution Control

A substantial portion of the comments made on the Hyde Street Fishing Harbor and Pier 45 Sheds A & C EIR concern the existing conditions in the Fisherman's Wharf area and issues related to Port management and supervision of the Harbor activities. These same issues have been raised by the Dolphin Club and South End Rowing Club since 1988 when the first development proposals were presented by the Port for the Fisherman's Wharf area. The establishment of this Committee is intended to address these issues and identify feasible and mutually agreed to solutions to specific problem areas.

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2. 1995 Fish Landing Information

2. 1995 FISH LANDING INFORMATION

The 1995 Commercial Fish Landings information was released by the California Department of Fish and Game after the DEIR was published. The 1995 data show a slight increase over 1993 and 1994 data for the pounds of fish landed in the San Francisco Bay Area (includes San Francisco, Bodega Bay, Princeton, Oakland and Sausalito). The 1995 total pounds landed for selected species is 49.6% less than the 1988 volume landed in the San Francisco Bay Area, and less than the total volumes for the five years preceding 1993.

The updated information replaces Table 1 on page 11 of the EIR and delete the table on the two pages following A.42. The first sentence on page 10 of the EIR is revised to:

As shown in Table 1 San Francisco Bay Area fish landings have declined between 1988 and 1995 from 21.8 million pounds to about 11.0 million pounds.

The last sentence of the first paragraph on page 10 is deleted.

3. CHANGES TO PROPOSED USES OF SHEDS A & C

The Port submitted the project description to City Planning, Office of Environmental Review, for the preparation of this EIR in early 1994. The alternatives that are analyzed in the EIR were also developed at that time and included various combinations of uses in Sheds A and C on Pier 45. However, unlike the Hyde Street Fishing Harbor, the ultimate proposed use of Sheds A & C remains undecided.

At the time that the EIR was initiated the Port requested analysis of the Fisheries Center in Sheds A & C as an example of possible high intensity development useful for analysis of potential significant adverse cumulative impacts resulting from development of the Hyde Street Fishing Harbor, in conjunction with the nearby Sheds A & C. However, any final development proposal for Sheds A & C would be made by the Port in consideration of the recommendations of the Pier 45 Advisory Group, a group of community representatives convened by the Port to advise the Port on the long terms uses in Sheds A & C.

The Pier 45 Advisory Group is composed of fishermen, fish processors, Port tenants and leaders of community organizations in the area. In the past months, following the publication of the DEIR, The Advisory Group has worked in unison with Port staff to address the long-standing issues that have precluded the productive use of Pier 45 for nearly 20 years. The Port will not proceed with any long term uses on Sheds A & C until the Advisory Group has made its recommendations. Depending on the final recommendations of the Advisory Group, subsequent environmental review may be required at a future time.

The Pier 45 Advisory Group is working with Port staff to study the feasibility of expanded truck operations in the valley of Pier 45, as well as additional fish processing uses in Shed C. In early June, following publication of the DEIR, the Port requested that the Final EIR address potential development of Sheds A & C as proposed by the Pier 45 Advisory Group. The Feasibility Study, completed in September 1996 (Rajappan & Meyer Consulting Engineers) considered three alternative uses for Sheds A & C. The configuration set forth below was discussed with the

Summary of Comments and Responses
D. Staff Initiated Text Changes and Errata
3. Change To Proposed Uses of Sheds A & C

Advisory Group and is now considered the Port's Preferred Alternative for Sheds A & C, replacing the Fisheries Center as the proposed project.

Figure 19a shows the layout of space for this alternative.

<u>Shed A:</u>	Fisheries Center/Event Space	40,000 s.f.
	Office (Pampanito)	10,000 s.f.
	Parking for 108 industry spaces	20,000 s.f.
<u>Shed C:</u>	Fish Processing	32,000 s.f.
	Storage	18,000 s.f.
	Truck Access/Bob Tail turnaround	30,000 s.f.

Due to physical constraints on the east side of the pier, the Port would not allow fish processing space in Shed C to receive fish by boat. Fish would be delivered by truck to the Fish Processing space in Shed C. This alternative would require that Shed C be completely upgraded.

Physical changes that are necessary to accommodate the preferred alternative include the following: an epoxy floor covering; electrical, telephone and potable water systems; sanitary and industrial sewers including a pump station; new roof; demising wall; interior and exterior painting. Physical alterations would also need to be made to allow truck access. These improvements were outlined in a conceptual cost estimates included in the Rajappan & Meyer study noted above, and based on an estimate by Moffatt & Nichol, Sept 4, 1996.

Shed A

- Construct internal separation wall between events/fisheries center area and parking.
- Demolition for and construction of new enclosed fire exits that exit to valley.

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3. Change To Proposed Uses of Sheds A & C

Shed C

- Provide new roof.
- Construct new sanitary and industrial sewer system on fill/piles.
- Place bonded concrete paving, polyester concrete and concrete coating to internal floor area.
- New electrical and telephone systems.
- Repair existing windows.
- Provide new roll-up doors.
- Interior and exterior painting and signage.
- Construct internal fire-rated corridor walls.
- Finish and place exterior manddoors, landings, area separation and misc. walls.

In addition, the Port is making repairs to the fendering system on the east side of Pier 45 to accommodate visiting ships. The project is included in the Port's Capital Plan. If fish processing space is created in the future in Sheds A & C, the Port anticipates that shipments will be made primarily by truck given the lack of a breakwater on the east side, thus allowing visiting ships to continue to tie-up on the east of Pier 45.

Employment estimates for 32,000 s.f. of fish processing space, based on average employment of tenants currently in Sheds B & D (average of employee) is 51 employees based on average sq.ft./employee of 565 in Sheds B & D.

Based on the Port's experience with Pier 45, Sheds B & D, the construction period for the preferred alternative would be approximately nine months, of which 50% of the time would be spent on interior improvements. This is based on the estimated construction cost of

Summary of Comments and Responses
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3. Change To Proposed Uses of Sheds A & C

approximately \$2.0 million noted in the Rajappan & Meyer Report.

The type of construction equipment involved would be: backhoes, hoe-ram, front end loaders, concrete trucks, roofing, equipment, dumpsters, asphalt trucks and paving equipment. (Source: Ed Byrne, Port engineer and project manager for Pier 45 improvements)

The existing truck docks in the 'valley' behind Sheds B & D would be reconfigured to diagonal back-in parking and a truck turn-around area would be added between Sheds B & D (in the shaded area on page 232a). Short (Bobtail) truck loading would be provided inside Shed C, with access from the 'valley' via a ramp between Sheds A & C, and a turnaround at the end of Shed C. Two to three semi-truck loading docks would be constructed at the end of Pier 45.

Approximately 108 parking spaces for commercial fishing industry employees would be provided in Shed A, with access to the parking from the 'valley' through a ramp between Sheds A & C.

IMPACTS

The primary difference between this Alternative and the Alternatives for Sheds A & C discussed in the EIR is the introduction of fish processing into Shed C. Physical changes to Pier 45 would be similar to those discussed in the EIR for the Fisheries Center, the Conference Center and Education Center Alternatives, with the addition of the floor sinks, industrial sewer system and concrete floor coating for fish processing. Fish to be processed or repackaged would be delivered by truck, not by boat, since there is no direct boat access provided along the east side of the Pier 45 apron. Impacts, therefore, would primarily be traffic and parking impacts related to trucks and employee vehicles for the fish processing use.

This alternative would generate a total of 4,819 net new person trips per weekday (compared to the 4,940 net new trips for the Fisheries Center proposed in the DEIR). The majority of the trips (about 4,300/day) would be associated with the event space in Shed A, and about 500 daily trips would be associated with the fish processing in Shed C. Peak hour weekday trips would be 438

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3. Change To Proposed Uses of Sheds A & C

(compared with 499 for the Fisheries Center Alternative) and peak hour weekend trips would be 615 (compared with 601 for the Fisheries Center).

The addition of a visitor-oriented attraction in Shed A would increase tour bus volumes, although not substantially, since 70% of visitors to a new attraction at Fishermans Wharf are linked to trips that would already be made to the Wharf.

Other impact areas (land use, water quality, marine biology, utilities, public services, air quality/odor, and hazards) would be the same as impacts for the proposed changes to Sheds A & C discussed in the EIR.

4. NO PROJECT ALTERNATIVE

The text on page 177 of the EIR is expanded to include additional information on the Harbor conditions under the No Project Alternative. The following text is added following the second full sentence, "No pump-out or restrooms would be available to fishing vessels or operators."

Without a convenient 20-gallon per minute pump-out facility, boat operators would need to pump-out vessel heads at Pier 39, the closest facility to Hyde Street Harbor. The potential for illegal disposal of human waste into the Bay without a convenient pump-out in the Harbor, and with the existing portable restroom facilities, would continue to exist.

The existing fueling facility would not be improved to include a new fuel delivery pipeline to the fuel dock equipped with an automatic shut off feature and leak detection system. Without the fuel delivery pipeline, the existing fuel truck would continue to be parked on the Hyde Street Pier. The potential for oil spills in a location in the Harbor that is closest to the Aquatic Park swimming area exists under the No Project Alternative.

Stormwater and urban runoff from the Hyde Street Pier would continue to drain into the Bay under the No Project Alternative, compared with the proposed oil-water separator proposed for the paved area of the Pier.

Public access to the Hyde Street Pier area would not be improved under the No Project Alternative. Night lighting would not be provided.

Transient and oversized commercial fishing boats would continue to raft in the Harbor or side-tie to other boats, making supervision and access to the boats difficult for the Harbor Master. [Modern facilities for the commercial fishing industry.] such as floating docks that are easily assessable from boats; storage and gear boxes; parking for boat operators; security gates at the foot of the dock for boat safety; and night lighting in the berthing area [would not be provided.] Unless and until Port could locate an available funding source, flexible skirts surrounding boats in a berth would not be provided and floatable debris from boats and other surface water contaminants would not be contained in the Harbor for the Port's skimmer to collect.

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APPENDIX A.
NOTICE OF EIR REQUIREMENT - INITIAL STUDY



**City and County of San Francisco
The Planning Department**

**1660 Mission Street
San Francisco, CA 94103-2414**

**INITIAL STUDY
HYDE STREET HARBOR BERTHS
AND PIER 45, SHEDS A AND C, PORTIONS OF B AND D**

TITLE: Hyde Street Harbor Berths, Harbormaster's Facilities, and Proposed New Uses for Pier 45, Sheds A and C

FILE NO: 93.574E **Street Address:** East Side of Hyde Street Pier and Pier 45 at the Foot of Taylor Street, San Francisco, California

ASSESSOR'S BLOCK AND LOT: Portions of Block 9900, Lots 2,5,6,7 **Date:** 5/10/94

PROJECT BACKGROUND:

The Port proposes to expand the number of available berths and improve its existing facilities for the commercial fishing industry. It would also add an applied research facility with a significant public education program. The proposed 86 new berths would be created on the reconstructed and expanded east side of the Hyde Street Pier; the Fisheries Institute, along with a variety of other uses to be described in this document, is proposed to be located on Pier 45, in all or portions of Sheds A and C. Figure 1, on the next page, is a recent aerial photograph of the project vicinity.

Pier 45, and the four sheds located on it, suffered considerable damage in the Loma Prieta Earthquake of 1989. The work of repairing the damage from that quake, which includes seismically reinforcing it and replacing all of the damaged utilities, has meant that all of those systems have had to be brought up to current codes. This work has been primarily funded by the Federal Emergency Management Agency (FEMA). The replacement and leasing of fish processing facilities in Shed B are anticipated to be completed and ready for occupancy in Fall 1994. It is anticipated that the work would be completed in Shed D by Summer 1995. The replacement of earthquake damaged facilities is a separate project from this proposal.

A breakwater, which shelters the entire harbor area from Pier 45 to Hyde Street, was constructed with US Government funding in the early '80's. The Hyde Street Pier was originally constructed in 1922 as a Ferry Pier. The condition of the Pier has been assessed many times over a 17 year period. These surveys document the progressive deterioration of the Pier, particularly in the shoreside area. This proposal would replace some of that portion of the pier and add new fill, for the Harbormaster's facility. Pier 45 was the principal location for fish processors prior to the 1989 earthquake.

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CITY PLANNING COMMISSION
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PLANS AND PROGRAMS
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Figure 1: Aerial Photograph of Project Vicinity

OCTOBER 1

PROJECT OVERVIEW:

The proposed project has three major components: new uses including a proposed Fisheries Institute and ancillary uses and services, which may include some retail, parking, office and public service space, proposed(at this time) to be located in Sheds A and C. These buildings are on the eastern side of Pier 45 at the foot of Taylor Street; establishment of a new 86-berth Hyde Street Harbor, located to the west of Pier 45, on the east side of the San Francisco Maritime National Historic Park (National Maritime Park). This is a new National Park and is not a part of the Golden Gate National Recreation Area (GGNRA); and harbor service facilities located partially on new fill that would include a new Harbormaster's building, fueling station, work dock, and a vessel pump-out station. The Harbor would be a new marina designed for the fishing industry. On the landside of the Harbor, and adjacent to the new Harbormaster's building, there would be provided a hoist and small ship repair working area that could be a facility shared with the Maritime Park. The Fisheries Center and the other facilities, such as the Underwater World holding tanks, could provide research, education, and training facilities for fishermen and women, processors, distributors, and the public.

EXISTING USES ON OR ADJACENT TO THE PROJECT SITE:

A major portion of the Hyde Street Pier is leased by the Port to the National Park Service (NPS) for the National Maritime Park. Seven historic ships that belong to the Park Service are moored off of both sides of the Hyde Street Pier. On the eastern, landward side, not part of the NPS lease, severe damage was done by the Loma Prieta earthquake. The area most severely damaged by the earthquake has been closed to the public since 1989. /1/ Restoration and additional fill of part of that area is included in this proposal.

While there are strictly only 99 existing berths, "double stacking" of boats allows about 120 berths for fishing boats at Fisherman's Wharf; these are located in both the Inner and Outer Lagoons. All berths are leased and used year-round. About 50 additional fishing vessels regularly use the harbor, and raft up to Pier 45, Wharf J7 nearby, or moor in the harbor wherever space is available. Throughout the year there are also varying numbers of transient vessels using the harbor. The herring season, which runs from November through March, is the busiest time of year for both fishermen and fish handlers at Fisherman's Wharf. There are about 500 boats in the San Francisco Bay herring fleet and Fisherman's Wharf is the most active harbor during the herring season./2/ Figure 2 shows the area as it is today with the footprint of the existing structures including the finger piers.

Prior to the Loma Prieta Earthquake of 1989, the primary use of the adjacent Pier 45 was to provide space for fish handlers and parking. There are four sheds on the Pier which total approximately 279,000 square feet. Sheds B and D (about 130,000 square feet) located on the west side of the Pier were used for fish handling and circulation (about 112,000 square feet), and storage of gear (about 18,000 square feet). Sheds A and C (149,000 square feet) located on the east side were partially vacant and had facilities which included support space for the Red and White fleet and the submarine Pompanito which was moored along the eastern edge of the Pier, office space for area merchants, parking, and a space where special public events, such as Festa Italiana, were held. The space between the sheds, the "valley", was used for truck access for tenants, and public and tour bus parking. /3/ Seismic repair and upgrade of Pier 45 is currently underway. It is anticipated by the Port that all of the above uses will return to Sheds B and D when the earthquake work is completed. In fact, there are some fish processors operating out of Pier 45 at this time.

Fish Alley and Wharf J7, which are located north of Jefferson Street, on the waterside and between Pier 45 and the Hyde Street Pier, would continue to house their present uses. At this time, Fish Alley contains fish landing and handling facilities, storage areas for various types of gear, and two fuel storage tanks. Only one of the tanks is in service. It is the present source for the existing fuel dock. There are also retail and art gallery uses, limited parking, and restaurants.

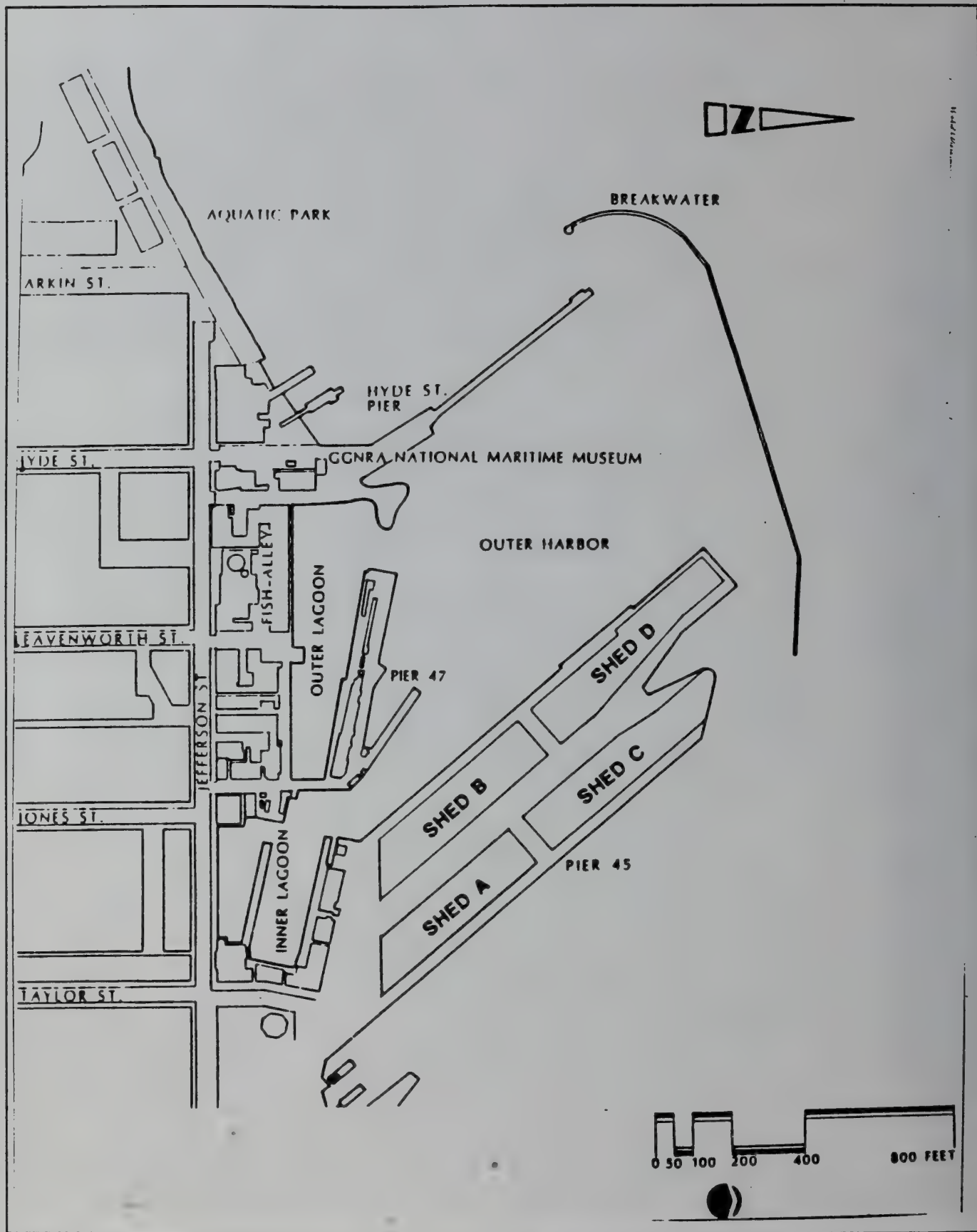


Figure 2: Existing Conditions

I. PROJECT DESCRIPTION:

The following description of the components of the proposed Project is subject to revision as the plans are finalized. A more detailed and precise description of the various project elements, and alternatives to them, will be provided in the Environmental Impact Report (EIR). See Figures 3 for proposed project drawing.

Pier 45 - Sheds A and C, Portions of B and D

- o The purposes of the Center, as defined at this time, would be to provide varying amounts of space for the following for the following uses: applied research; a small conference center; education and training for members of the fishing industry including the processors and distributors; backup facilities for Underwater World; office; retail; parking. The Fisheries Center would also serve to educate the public about the fishing industry, allowing observation of a working fish harbor and pier, and would provide education and interpretation of the surrounding Bay and ocean environment. There are three design alternatives being examined by consultants to the Port for the proposed fisheries and environmental center that is proposed on Pier 45. These will be examined in the EIR.
- o The mixed use facility, containing the elements listed above, could occupy all, or portions of Sheds A and C. These buildings, with mezzanines, have available approximately 185,000 square feet. The size of individual operations would range from an estimated 5,000 square feet to 50,000 square feet. For example, in one alternative being examined by the consultants, there would be: a Visitor Center of 40,000 square feet; an adjunct tank/research facility to Underwater World Aquarium of 30,000 square feet; a Conference Center of 18,000 square feet; office of 15,000 square feet; retail of 22,000 square feet; and parking occupying 50,000 square feet. At this time, for some of the uses described above, an additional 30,000 square feet divided between Sheds B and D is also being discussed.

Hyde Street Harbor Berthing System (see Figure 4, page 8):

Reconstruction of the east side of the Hyde Street Pier would include the replacement of the rock fill and timber pier structure (about 0.16 acre) with 0.07 acre of solid fill and 0.63 acre of concrete pile supported pier. There would be 0.54 acre of net new Bay fill as a result of this reconstruction. The floating docks are not included in these figures. Figure 4 shows the proposed Harbor facilities described below.

- o The new berthing system would consist of 86 floating berths supported by a concrete guide pile berthing system, with 120 new 24 inch rectangular concrete piles. The floating docks are considered bay fill by the Bay Conservation and Development Commission (BCDC) regulations. The surface area covered by the walkways to the berths would be approximately 27,000 square feet, which includes the foam pontoons.
- o Berths would be provided by floats with encased foam pontoons that would ride slightly below the surface of the water.
- o Of the 86 berths, ten could accommodate oversized vessels in "stern-to" berths (berths without separating floats to which vessels tie at their sterns) and an additional 20 oversized vessels could be accommodated along 1320 linear feet of dock.
- o A single security gate at the brow (shore end of the pier) would limit access to berth holders and harbor personnel.
- o There would not be any berthing on the west side of the float closest to the Hyde Street Pier and Aquatic Park. The westernmost float would be fitted with a flexible "skirt" which would eliminate gaps between floats and provide a measure of water quality protection.

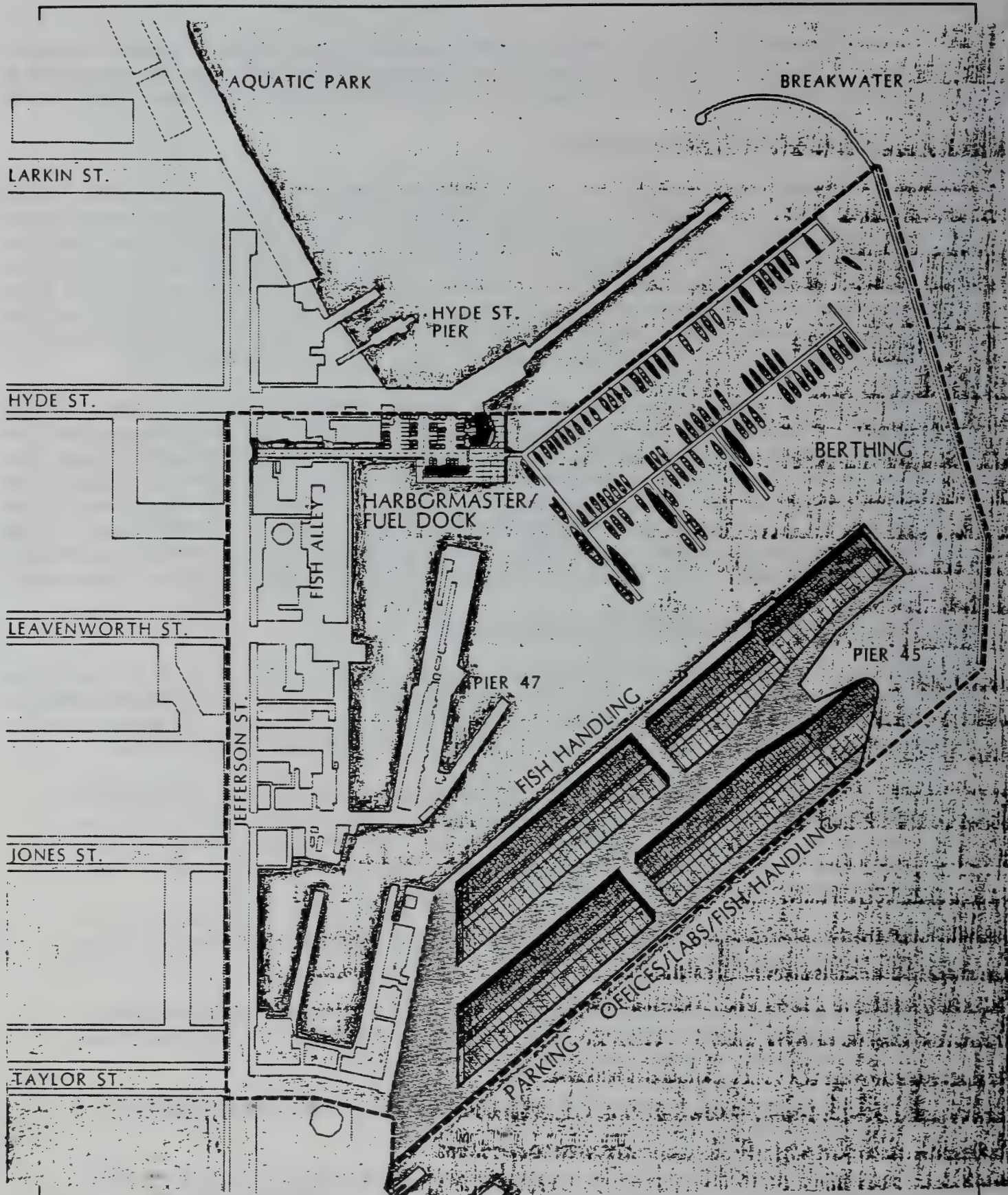


Figure 3: Proposed Hyde Street Harbor and Pier 45

- o The berthing system would include lighting, electrical power, water and fire protection systems, deck boxes and carts for each berth. There would be a 20 gallons per minute sewage pumpout unit for use by the boats. This new equipment would be located on the pier in the vicinity of the fuel dock and work hoist.
- o First priority for use of the berths would be given to commercial fishing vessels in accordance with Port of San Francisco Tariff No. 3-C, Section 8 - Fishing Industry.

Harbor Services Proposed for the Hyde Street Pier Expansion (see Figure 5 page 10):

- o A work dock would be developed to provide space and a hoist for transferring gear and equipment, and a place to drop off gear from vessels. It would occupy the new fill that would be located on the northerly portion of the pier beyond the existing fuel dock.
- o The existing fuel station building of 420 square feet, now located on a pile supported pier, would be replaced with a one-story harbor services/fuel dock building of 1500 square feet located on partial new fill. Included in this facility would be:
 - 1/ 100 square foot fuel dock and staff restroom
 - 2/ 900 square foot convenience store
 - 3/ harbor maintenance shop
 - 4/ trash storage compound consisting of a covered and enclosed area of 100 square feet on the north side of the building which would contain two dumpsters for use by fishermen.
- o A new fuel station would include a fuel dock with three dispensers equipped with automatic shut off features; a leak detection system; remote operated shut off switch and pressure sensitive automatic shut-off valves.
- o The new fuel station would have impermeable surfaces with all runoff collected in gutters located along the pier edge. Runoff would be transported in pipelines to a pretreatment facility on site before flowing into the City sewage system. The fuel dock area would be provided with lighting and spill containment equipment.
- o A new/replacement fuel delivery pipeline from the seawall to the fuel dock would be installed.
- o Oily waste disposal facilities would be provided in a clearly marked location in the working area.
- o A vessel sewage pump-out station would be installed with a 20 gpm pump-out capability directly connected to the City's sanitary sewer system.
- o In areas to be excavated for utility lines, contaminated soil would be treated by bioremediation on a nearby site or, depending on the level of contamination, removed from the site and disposed of at an approved location..

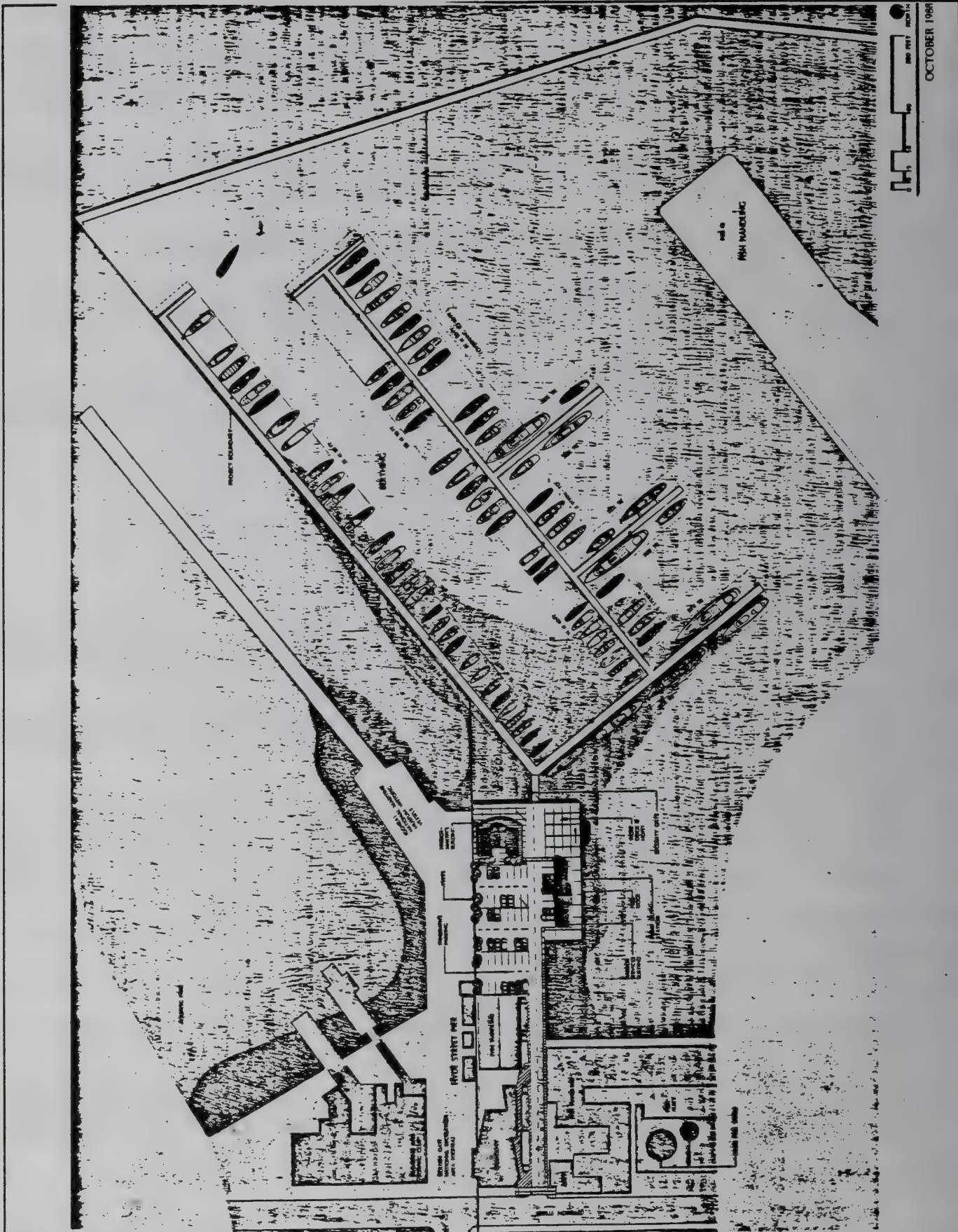


Figure 4: Hyde Street Harbor Proposed New Berths

Harbor Master Building:

- o The proposed project would also include a two-story 4100 square foot Harbormaster's Building described below. It would be located on the new fill at the end of the Hyde Street Pier on the eastside:
 - 1/ An office for the Harbormaster, with space for California State Department of Fish and Game and U.S. Coast Guard or other governmental agencies.
 - 2/ Showers, toilets, and laundry for use of the fishermen.
 - 3/ Public toilets
 - 4/ Second floor observation deck accessible to public.
- o Parking for 52 vehicles is proposed over existing land and/or over new fill or deck. 42 spaces would be over existing land for short-term use by fisherman, 10 would be over new fill or deck at the Harbor Services and Harbormaster's buildings for staff and visitors.
- o All storm runoff and sanitary sewer sewage would be captured and disposed of through the City sewer system.
- o Public access would be provided on the new pier (excluding the fuel dock area proposed to be located behind the Harbor Services Building). The Harbormaster's Building would have a second level viewing deck available for the public. The new berths would only be accessible to berth users.

Construction Activities:

There would be a total of approximately 0.54 acres of net new land fill that would be placed and compacted prior to the beginning of construction activities. The fill that would be required for the landside construction activities would be staged from a lease area on the east side of the entrance to the Hyde Street Pier. Placement of this fill, as well as the berthing system water coverage, would require a permit from the Bay Conservation and Development Commission (BCDC).

Dredging and pile driving would be necessary to create the berths. This requires approval of the United States Army Corps of Engineers and the Regional Water Quality Board. It is estimated at this time that approximately 20,000 cubic yards would be dredged from the harbor.

II OVERVIEW OF THE AREA SURROUNDING THE PROJECT:

This proposal would be located at Fisherman's Wharf, an area bounded generally by Pier 35 on the east; Aquatic Park on the west; The Pier Head Line in San Francisco Bay on the north; and North Point, Bay and Francisco Streets on the south. There are approximately 374 acres of land and water included in this general area along the northern waterfront of San Francisco; 175 acres are on land, which includes the piers.

The Project Area for the proposed Hyde Street Harbor and Pier 45 Improvements to Sheds A and C, is located on property controlled by the Port Commission. It is adjacent to property leased from the Port by the the the National Park Service and other land controlled by the City and County of San Francisco. Other agencies, including the California State Lands Commission, the Bay Conservation and Development Commission (BCDC), the Regional Water Quality Control Board, the United States Army Corps of Engineers (COE), the United States Coast Guard (Coast Guard), have planning authority or regulatory powers in

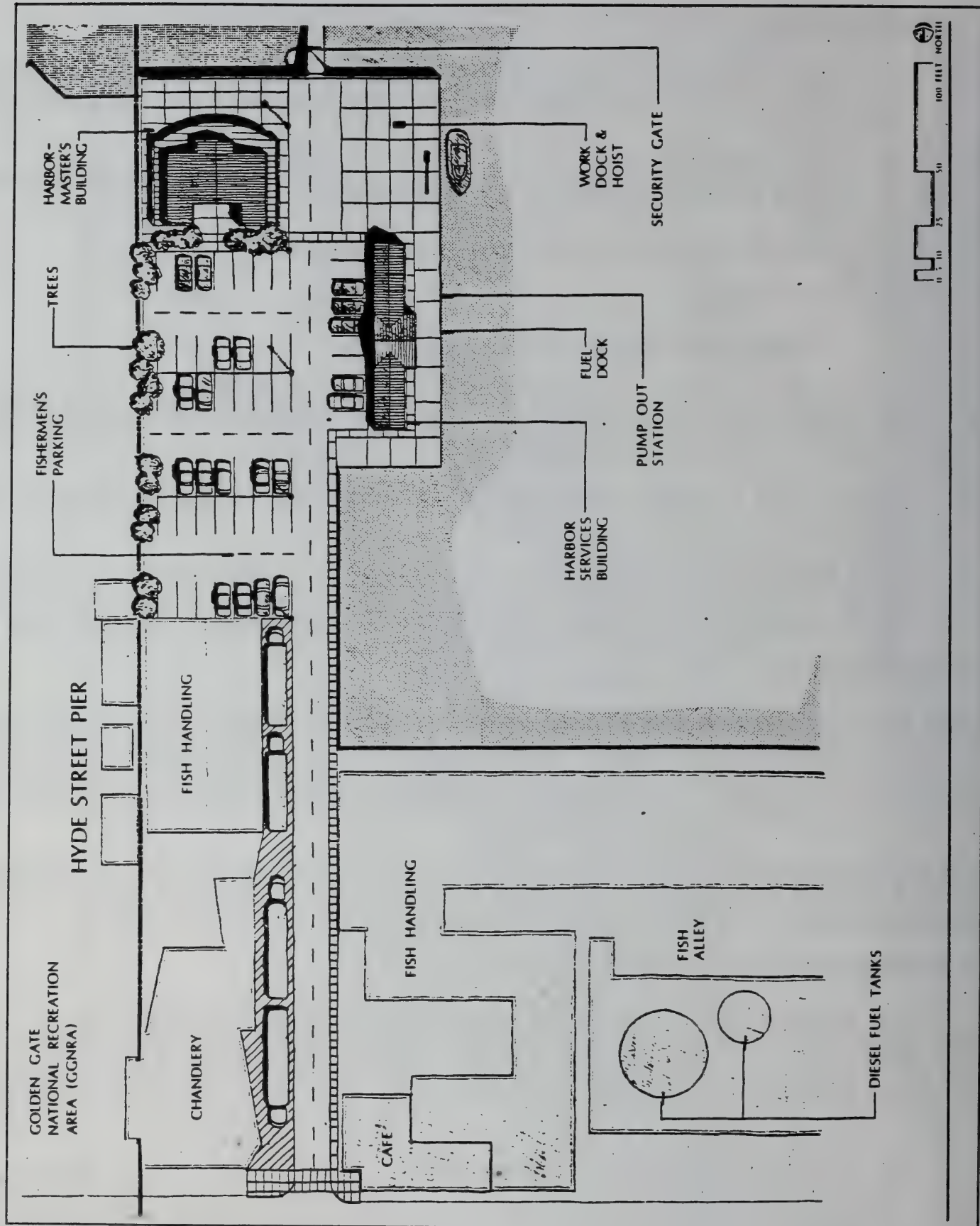


Figure 5: Harbor Service Facilities

portions of the Project Area. A complete analysis of agencies that may have jurisdictional or regulatory concerns with the proposed project will be included in the EIR.

Principal existing land uses on the Jefferson Street properties immediately adjacent to or within the Project Area are retail, restaurant and entertainment. Within the Project Area as defined in Figure 2, uses include fishing and maritime/industrial, office, recreation and open space, public/quasi-public and parking.

In the past, Fisherman's Wharf was characterized by a combination of maritime and fishing-related activities and other distribution, transportation, and industrial uses. Although these uses have not been entirely displaced in the Wharf area, the mix of development since the mid-1960s has become more tourist serving, with the exception of the proposed project location and its immediate vicinity.

In the area under City Planning Commission jurisdiction which surrounds the Project site, hotels, specialty retail/restaurant complexes, food service, and entertainment establishments have become principal land uses. Commercial developments include seven hotels, North Point Shopping Center, Cost Plus Imports retail store, and Ghirardelli Square, Cannery and Anchorage specialty retail/restaurant complexes. Residential and public infrastructure uses include the 514-unit North Point Apartments, the 229-unit North Beach Place public housing project, the San Francisco Municipal Railway (MUNI) Kirkland Bus Yard, and the North Point Water Pollution Control Plant /5/

At what is known as Fisherman's Wharf, commercial maritime and fishing activities remain principal uses in areas under Port jurisdiction. These areas include piers, shoreline, waterfront extending bayward to the U.S. Pier Head Line, the underground seawall along Embarcadero Roadway, and seawall lots adjoining the Embarcadero.

Within one mile of the proposed additional fishing fleet berths, Pier 39 maintains 350 berths for recreational boats. It was developed in the late 70's. There are two pump out stations, and a boat that services other boats within the harbor; this number of pump out facilities allows 10 liveaboards to berth there. /6/

Tourist-serving retail and restaurant uses under Port jurisdiction are concentrated in three areas: the Pier 39 specialty retail/restaurant complex, the north end of Taylor Street, and along the north side of Jefferson Street west of Mason Street, adjacent to the proposed project. Other prominent developments on nearby Port properties include the five-level Pier 39 parking garage, surface parking on the Triangle and on Piers 43 and 43-1/2, tourist-serving ferry facilities along the waterfront from Pier 41 to Pier 45, and fish handling/maritime facilities along Fish Alley and within Pier 45. Fish Alley extends along Seawall Lots 302 and 303 between Jones and Hyde Street.

Principal uses adjacent to the proposal on the west side in areas under City and Maritime National Park Service jurisdiction include Aquatic Park, the Municipal Pier, the San Francisco Senior Center and the Maritime Museum. The Dolphin Club and the South End Rowing Club, occupy land zoned P (Public Use), and Aquatic Park, are under City jurisdiction. The adjacent Pier 43, on the east side of the proposed new improvements to Pier 45, is the Red and White Fleet Tourist Boat berth.

III. SUMMARY OF POTENTIAL ENVIRONMENTAL EFFECTS

The Fishermen's Wharf Seafood Center and Hyde Street Harbor is examined in this Initial Study to identify potential effects on the environment. The Initial Study identifies some project-specific impacts that are potentially significant. In addition, there are some anticipated possible cumulative impacts. Thus, an EIR

will be required. The purpose of the EIR will be to analyze areas of potential impact in greater detail and recommend appropriate mitigation measures. The following summary first lists areas of impact that would be analyzed in an EIR followed by those topics to be discussed in the attached checklist, and thus not necessary to include in the EIR:

A. Effects Found To Be Potentially Significant:

- o Transportation issues related to the ability of existing infrastructure to serve project-generated traffic, including congestion and traffic safety.
- o Impact on public utilities and services, primarily the sewer system, and the ability of existing local services and utility providers to meet the needs of the proposed project.
- o Air quality issues related to objectionable odors and may include traffic and boat emissions.
- o Biology issues, including whether the project may affect sensitive habitats that support rare or endangered species or species of special concern.
- o Water quality and hydrology issues, including but not limited to possible sources of water pollution, how the project may affect the use of the water for recreational activities, and possible impacts of the proposal on surface as well as deeper waters of the Bay, drainage, and ground water.
- o Public safety, including the potential for the proposed project to expose the public to hazardous materials, and the adequacy of emergency response services.
- o Cumulative impacts of the proposed project combined with other projects planned for the area, primarily transportation issues.

B. Effects Found Not To Be Significant:

The following areas have been determined not to be significantly affected by the proposed project, or any effects would be mitigated to a less-than-significant level through measures proposed by the project sponsor. These areas of study are discussed in greater detail in the Environmental Evaluation Checklist and Discussion, Section IV, and require no further analysis in the EIR:

Land Use, Item 1(a,b): As a minimal expansion on the new fill area and modification of space within existing buildings (Sheds A and C), the project could not disrupt or divide the physical arrangement of an established community. Proposed uses are expansions of either existing water-oriented uses, or similar uses that exist close by, and would not change the character of the area. The portions of the project that would require bay fill will be extensively discussed in the EIR to the extent that they may affect biology, water quality, and relevant topics other than land use. Existing land uses on the Project site and in the surrounding area will be described in the EIR to help orient the reader.

Visual Quality, Item 2(a,b,c): There will be little or no change in the visual effect of the proposal in that any additional structures would be small scale (less than 40 feet in height).

View access to both the Bay and the industrial-fishing activities at Pier 45 would be improved. There would be a new observation deck on the second level of the harbor master's building, and there would be more linear feet of pedestrian access around the perimeter of the new fill than presently exists.

Population, Item 3(a,b,c): The project would not generate a substantial amount of new employment or create a substantial demand for new housing. The project would not displace any existing residences or businesses. The new berths would accommodate ships that were temporarily anchored in the harbor vicinity but without an assigned berth. Some of the ships may have temporary live-aboard facilities. Fishing boats permanently berthed in the existing harbor at Fisherman's Wharf would be owned and crewed by persons who already have housing since the existing facilities do not include the pump out station required for a harbor to legally accommodate liveaboards.

Noise, Item 5(a,b,c): A noise report on a previous project has been prepared which concluded that the noise from the increase in activities from that proposal could barely be perceived.

Air Quality/Climate, Item 6(a,b,d): The project would not alter wind, moisture or temperature, add shadows substantially affecting public areas, or otherwise have the capability to change the climate in the community or region.

Utilities/Public Services, Item 7(c): The project would not substantially increase demand for schools, recreation, or other similar public facilities.

Biology, Item 8(c): This is a proposed Bay project; no trees are on the site.

Geology/Topography, Item 9(a,b): New fill for the Harbormaster's facilities and proposed new structures would be engineered to withstand seismic events.

Energy/Natural Resources, Item 11(a,b): The utilities that would be necessary to supply to the boats when they were berthed would be minimal. Energy, water and fuel use would be minimal due to the relatively small size of the project.

Cultural, Item 13(a,b,c): There would be no disruption of an archaeological site or property of historic significance. The proposed project could be viewed as enhancing the available recreational and educational resources and opportunities available to the public and would not conflict with established recreational, educational, religious, or scientific uses of the area.

IV. ENVIRONMENTAL EVALUATION CHECKLIST

A. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	<u>N/A</u>	<u>Discussed</u>
1. Discuss any variances, special authorizations, changes proposed to the City Planning Code or Zoning Map, if applicable.	<u> </u>	<u> X </u>
2.* Discuss any conflicts with any other adopted environmental plans & goals of the City or Region, if applicable.	<u> </u>	<u> X </u>

The City Planning Code, which incorporates by reference the City's Zoning Maps, governs permitted uses, densities, and the configuration of buildings within San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) may not be issued unless either the proposed project conforms to the Code, or an exception is granted pursuant to provisions of the Code. On Port property, building permits are issued by the Port. Other entitlements, such as conditional use authorizations when necessary, are the province of the City Planning Department.

Located in the Fisherman's Wharf area, the site is bounded by San Francisco Bay to the north, the San Francisco Maritime Park to the west, Jefferson Street to the south, and Taylor Street to the east. It is in a C-2 (Community Business) use district, and a 40-X height and bulk district, and in the Northern Waterfront Special Use District No. 1, in which non-maritime uses require Conditional Use Authorization and maritime-related uses are permitted. The site contains uses associated with the fishing industry, and restaurants and shops serving the tourist industry and San Francisco residents. The proposed project would require a conditional use authorization if non-maritime related uses are contained within the proposal. There are minimal conflicts with the existing zoning or land use designation for the property. Further discussion in the EIR will be provided for this topic.

Compatibility with existing plans is an issue that will be discussed in the EIR. There are several Plans that have policies that may conflict regarding treatment of waterfront lands and the Bay waters, and there are also multi-jurisdictional considerations. The site is in an area under the jurisdiction of the Army Corps of Engineers, the State Lands Commission, the Bay Conservation and Development Commission, the City Planning Commission, and the San Francisco Port Commission, each of which would need to approve those aspects of the proposal within their specific jurisdiction. In addition, Proposition H, a measure passed by the voters in 1990 mandating that a plan for the waterfront be developed and that uses be restricted to water oriented uses, applies to the site.

The Northeastern Waterfront Plan, an Element of the San Francisco Master Plan, addresses land use at the project site. Objective 11 is to "maintain and enhance the maritime character of the Fishermans's Wharf area and enhance the area as a center for the commercial fishing industry.' Policy 1 is to "encourage the retention and expansion of the commercial fishing and fish handling industry and businesses which provide services to the fishing fleet through construction of a new breakwater in the general area of the Hyde Street pier." The Bay Conservation and Development Commission, the State Lands Commission, the directives of Proposition H passed by the voters of San Francisco, and the Port Commission, prohibit or discourage the use of Pier 45 for anything other than maritime or maritime related uses. The EIR will provide further discussion of jurisdictional and other agency related issues.

* Derived from State EIR Guidelines, Appendix G, normally significant effect.

B. ENVIRONMENTAL EFFECTS

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
1. <u>Land Use</u> - Could the project:			
a.* Disrupt or divide the physical arrangement of an established community?	___	<u>X</u>	<u>X</u>
b. Have any substantial impact upon the existing character of the vicinity?	___	<u>X</u>	<u>X</u>

A breakwater was constructed in 1985 by the COE to provide a sheltered harbor area for the fishing fleet. It is located within the U.S. Pier Head Line in the water area between the Hyde Street Pier and Pier 45; it was assumed that more berths would be added. The project under evaluation would add those additional berths. The project would expand and continue uses that have existed in the area for decades; thus it would not disrupt or divide the physical arrangement of an established community. The new Harbormaster's Building and facilities would be of the same scale as the nearby buildings and designed to be visually compatible with those structures. No additional existing land area (on the landward side) would be required. The amount of bay fill placed between the shoreline and the Hyde Street Pier for the Harbormaster's facilities, a total of 0.54 acres or 23,522 square feet of net new fill would not divide an existing community.

The total volume of fish that would arrive and could be handled in Wharf facilities would be greater than at present. There would be the possibility of more ships (about 86) bringing in to the harbor to be processed fish that are "landed" or caught. Fish "handled" at the harbor include, in addition to the fish "landed" and arriving by boat, those which are brought to the harbor by trucks. Large quantities of fish now change hands between fish brokers and distributors out of trucks in the early morning hours on Jefferson Street, or existing packing/processing houses nearby, such as those located in Fish Alley or on Pier 45. Large shipments may arrive by boat or truck from other harbors to be broken down into smaller packages in Fisherman's Wharf facilities. A fish is landed only once; it may be handled many times. The potential has always existed for large additional quantities of fish to be handled at the Wharf that are not caught there. Thus, present fishing uses would not change substantially but would intensify.

The volumes of fish landed at the Port of San Francisco are monitored and reported by the Department of Fish and Game. The current situation will be discussed in the EIR. The volumes of fish handled "unofficially" on Jefferson Street out of trucks are not currently monitored. When the current work that is underway on Pier 45 (FEMA Earthquake Repair) is completed, the improvements to the valley area between the sheds on Pier 45 would allow the Port to move into this area the trucks that are now conducting the trading on Jefferson Street.

There are some "new" uses proposed for Sheds A and C. In actuality, the uses, such as retail and office would be new to the site but not the area. The setting in the EIR will include a discussion of this for purposes of orienting the reader.

2. Visual Quality - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Have a substantial, demonstrable negative aesthetic effect?	___	<u>X</u>	<u>X</u>
b. Substantially degrade or obstruct any scenic view or vista now observed from public areas?	___	<u>X</u>	<u>X</u>
c. Generate obtrusive light or glare substantially impacting other properties?	___	<u>X</u>	<u>X</u>

* Derived from State EIR Guidelines, Appendix G, normally significant effect.

The site for the proposed new berths is open water at present. There are a number of industrial and maritime structures on the landside. The buildings on Fish Alley, while receiving some renovation, would remain substantially the same. New buildings would replace the smaller buildings on the Port's portion of the Hyde Street Pier (there would be no change to the GGNRA Maritime Park facility). The tallest building, the proposed new Harbormaster's building, would be two stories and about 30 feet tall. It would be taller than the existing structures on the GGNRA portion of the Hyde Street Pier; those structures range from ** feet to **. The new building would be visible from vantage points to the south on Russian Hill and from the Bay. The proposed Harbor Services Building would be one story tall and would be less visible from outside of the project area. The two proposed buildings have been sited to preserve the views of the Bay and the Historic Ships from Hyde Street. No scenic views or vistas now observed from public areas would be substantially degraded by these proposed buildings.

The proposed berthing system, and boats using these berths, would be visible from vantage points on the waterfront from Aquatic Park to Pier 45. Views of the Bay would continue to be available between the boats. The addition of boats to currently available Bay views would not detract from these maritime views. The project would not degrade the character of this space or result in a significant negative visual impact on the area. It will not be required to discuss the topic of visual quality further in the EIR.

The site contains a number of industrial and maritime structures. New public access and viewing areas would be incorporated into the new uses on Pier 45 in Sheds A and C as well as in the Harbormaster's building on the Hyde Street Pier. The four sheds on Pier 45 would remain. They received some renovation with the earthquake upgrading, but their size and shape would remain substantially the same. It will not be necessary to discuss the topic of visual quality further in the EIR.

3. Population - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Induce substantial growth or concentration of population?	___	<u>X</u>	<u>X</u>
b.* Displace a large number of people (involving either housing or employment)?	___	<u>X</u>	<u>X</u>
c. Create a substantial demand for additional housing in San Francisco, or substantially reduce the housing supply?	___	<u>X</u>	<u>X</u>

The existing daily population near the project site includes fishing boat owners and crews, employees, customers, and other visitors (which includes tourists) to the existing harbor, boats, public parks and recreation areas, parking, restaurants, galleries, offices, and other retail spaces. Following project construction, the daily population of the site would include the same mix with the addition of more users and visitors to the new uses on Pier 45 and to the harbor facilities and new berths that are proposed. Overall, the proposed project might increase the daily population on the site. Any potential increase in visitor population might be noticeable to immediately adjacent neighbors, but would not substantially increase the existing area-wide residential population.

The proposed project would not displace any existing housing or commercial enterprises and therefore would not displace residents or employees. There may be a small number of new long-term jobs created as a result of the project operation, as well as some number of short-term construction-related jobs. These prospective employees would likely consist of Bay Area residents from various communities and some persons relocating to the area. The relatively small number of future employees seeking housing would likely locate in a dispersed area, and could be accommodated without substantially affecting the stock of available housing in Bay Area communities. The ships utilizing the new berths would be expected to have crews that either already live in the area or live elsewhere and would seek temporary accommodations while their boat

* Derived from State EIR Guidelines, Appendix G, normally significant effect.

is in this harbor. The EIR will not provide further discussion of population, housing or employment issues related to the proposed project.

4. Transportation/Circulation - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?	<u>X</u>	<u> </u>	<u>X</u>
b. Interfere with existing transportation systems, causing substantial alterations to circulation patterns or major traffic hazards?	<u> </u>	<u>X</u>	<u>X</u>
c. Cause a substantial increase in transit demand which cannot be accommodated by existing or proposed transit capacity?	<u> </u>	<u>X</u>	<u>X</u>
d. Cause a substantial increase in parking demand which cannot be accommodated by existing parking facilities?	<u>X</u>	<u> </u>	<u>X</u>

The EIR will examine existing traffic levels and the capacity of existing roadways in relation to the expected increase in traffic levels that would be generated by the proposed project. Particular attention will be paid to the potential increase in truck traffic related to the fish handling business which could be an outcome of the project.

The EIR will specifically analyze existing and projected Levels of Service (LOS) for designated area intersections. If these analyses show that there is the potential for a significant decrease in the service level of intersections, mitigation measures designed to alleviate traffic congestion will be developed and discussed. Pedestrian and traffic safety issues will also be addressed in the EIR.

Parking facility demand and supply will be analyzed in the EIR. The EIR will detail existing facilities, estimate expected demand as a result of the proposed project and determine whether the proposed plans provide sufficient parking.

While the potential increase in traffic and parking demand would not be expected to be significant within the urban context of the site's vicinity, transportation issues are of interest and concern to residential and commercial property owners, tenants, and visitors throughout San Francisco. For this reason, and because existing parking and traffic conditions in the vicinity are already congested, the EIR will discuss potential effects of the project related to automobile traffic, transit, and parking. Potential traffic impacts during construction will also be discussed in the EIR.

5. Noise - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Increase substantially the ambient noise levels for adjoining areas?	<u> </u>	<u>X</u>	<u>X</u>
b. Violate Title 24 Noise Insulation Standards, if applicable?	<u> </u>	<u>X</u>	<u>X</u>
c. Be substantially impacted by existing noise levels?	<u> </u>	<u>X</u>	<u>X</u>

A noise study done for an earlier proposal at Pier 45 quantified the existing noise levels and assessed the potential for increased noise levels as a result of a very similar proposed project. That report is summarized here. /7/ The closest sensitive receptors include the recreational users of Aquatic Park and the Dolphin Swim Club and the South End Swimming & Rowing Club, the GGNRA Hyde Street Historic Park visitors, several hotels located between one and two blocks from the project, and residences two blocks and more from the site. Noise measurements were taken at 25 locations in the project area and in nearby residential

areas. Both daytime and early morning (3:30 to 6:30a.m.) measurements were taken. Daytime readings ranged between 51 and 77dBA, with peaks associated with such events as buses, cable cars or fire engines passing reaching up to 84 dBA. Early morning readings ranged between 42 and 73 dBA, with peaks up to 84 dBA. The results show that the project is in an area with relatively high noise levels resulting from high volumes of traffic on nearby streets.

Peak noise generation at the project site occurs now and would occur in the future with the project during the herring season (December to early April), when pumps operate at Pier 45 and higher levels of fishing industry related traffic occur. The Port has received complaints about pump noise during this time of year. An electric pump operating when the noise measurements were taken registered about 70dBA at a distance of 50 feet. Average vessel starting noise is about 75dBA. Two vessels starting simultaneously produce a total of about 78dBA. The project would result in new noise generation from additional machinery associated with the fishing industry, from additional vessel motors, and from new traffic generated by the project.

The noise level increases by 3dBA for every doubling of the noise source in a similar location and is reduced by 6dBA for every doubling of distance from the source. An increase of 3dBA is "just noticeable" to humans. Against the background noise of trucks and buses currently experienced during the early morning hours in places between Pier 45 and the residential areas, with twice the present number of pumps in place and electrified, three quarters of them running simultaneously and two fishing vessels starting up, the noise level of the combined activity would barely be perceived at Jefferson and Taylor Streets. The noise level at 4:00 a.m. would be increased by about 3dBA, which is "just noticeable" to humans, over the current background. By 5:00 a.m., the background noise level would drown out any noise from the project. The recreational users of the nearby Parks and Clubs, considered to be sensitive receptors to noise, are typically not in the area until after 5:00 a.m.. Therefore, noise impacts are not considered significant and this topic will not be further discussed in the EIR.

Construction activities would generate noise. The greatest noise impact would occur during a period of about one month, when piles would be driven for the new berths about 300 feet to 600 feet north of Jefferson Street. The noise level from pile driving is about 105dBA at a distance of 50 feet. At nearby points in direct line (without intervening structures in the path of sound waves), such as points within the project site and Aquatic park, noise levels during this period would range from 83 to 89 dBA at the nearest section of Jefferson Street. This would be noticeable above the noise levels currently observed. In the flat areas to the south of the project site, this noise would be somewhat attenuated by distance and the intervening buildings. From residences on Russian Hill, without intervening structures, pile driving would perceptibly increase the present background noise levels to between 65 and 68 dBA, up to 3 dBA above the existing background noise levels. Because pile driving produces an intermittent noise, it would be more than "just noticeable" to residents even though average ambient noise levels would increase by only about 3dBA. However, construction noise is a short term impact, and therefore not considered to be a significant environmental impact except for unusually long construction periods (e.g. several years). Construction noise is regulated by the San Francisco Noise Ordinance (Article 29 of the City Police Code). Section 2908 of the Ordinance prohibits construction work at night, from 8:00 p.m. to 7:00 a.m., if noise would exceed the ambient noise level by five dBA at the project property line, unless a special permit is authorized by the Director of Public Works. There will not be a further discussion of this topic in the EIR.

* Derived from State EIR Guidelines, Appendix G, normally significant effect.

6. Air Quality/Climate - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation?	___	<u>X</u>	<u>X</u>
b.* Expose sensitive receptors to substantial pollutant concentrations?	___	<u>X</u>	<u>X</u>
c. Permeate its vicinity with objectionable odors?	<u>X</u>	___	___
d. Alter wind, moisture or temperature (including sun shading effects) so as to substantially affect public areas, or change the climate either in the community or region?	___	<u>X</u>	<u>X</u>

Demolition and construction activity would temporarily raise dust levels in the area, but not to a level that would have significant impacts upon air quality, particularly because disturbed soils in the project area would be wet either from the Bay or from shallow ground water levels.

The Bay Area Air Quality Management District (BAAQMD) has established thresholds for projects requiring its review for potential air quality impacts. These thresholds are based on the minimum size projects (must generate more than 2000 vehicles per day) which the District considers capable of producing air quality problems; it does not appear that the project would exceed this minimum standard. If the transportation analysis prepared for the EIR indicates that it does, this topic would be included in the EIR.

The Port has received complaints in the past regarding odors from fish processing activities on Pier 45 as well as those that occur around the boats in the harbor. There will be further discussion of this topic in the EIR.

The proposed project would not substantially alter wind, moisture, or temperature conditions in the area. The proposed new structures would not be large enough to substantially alter wind patterns or cause a wind tunnel effect. Given the scale and locations of proposed buildings, they would not cast substantial shadows on public areas or cause any change of ambient temperature in a public place. The project does not include buildings or paved areas in sufficient volumes to alter the climate in the community or region. The EIR will not contain any further discussion of the proposed project in relation to ambient temperature or weather conditions on the site.

The boats use diesel fuel. Diesel-powered equipment would emit, in decreasing order by weight, nitrogen oxides, carbon monoxide, sulfur oxides, hydrocarbons, and particulates. These emissions would increase local concentrations intermittently.

7. Utilities/Public Services - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Breach published national, state or local standards relating to solid waste or litter control?	<u>X</u>	___	<u>X</u>
b.* Extend a sewer trunk line with capacity to serve new development?	___	<u>X</u>	___
c. Substantially increase demand for schools, recreation or other public facilities?	___	<u>X</u>	___
d. Require major expansion of power, water, or communications facilities?	___	<u>X</u>	<u>X</u>

The EIR will discuss solid waste facilities affected by the proposed project and quantify the expected effect of the proposed project on these facilities.

Following the damage done to Pier 45 and its sheds in the 1989 Loma Prieta Earthquake, extensive work was required on all existing utilities and other systems. A description and analysis of that work and the completion and occupancy status will be discussed in the EIR.

There will also be a replacement of the sanitary sewer systems on the Hyde Street Pier. Stormwater runoff from the Hyde Street Pier currently drains directly into the Bay. With the project, the surface area at the Hyde Street Pier would increase. This runoff from the roof of the proposed buildings and pier deck at Hyde Street would be collected and treated before discharge into the Bay. A description of the new system and the water quality ramifications of these changes will be included in the EIR.

The proposed project could not have a significant effect on school facilities or generate a substantial number of new students to any one school facility. This determination is based on the relatively small number of new jobs that are expected to be generated by this project. The EIR will not contain any further discussion of impacts to school facilities. Similarly, usership of existing park and recreation facilities in the project vicinity would not be substantially affected by the limited and dispersed population increase associated with project-related employment. The EIR will not contain further discussion of effects on recreation and similar public facilities.

There are no known proposed or required new utility substations or new water supplies that would be required to serve the proposed project. There would be an increased demand for and use of public services and utilities on the site, and an increase in water and energy consumption, but not in excess of amounts expected and provided for in this area. There will be no further discussion in the EIR.

8. Biology - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Substantially affect a rare or endangered species of animal or plant, or the habitat of the species?	<u>X</u>	<u> </u>	<u>X</u>
b.* Substantially diminish habitat for fish, wildlife or plants, or interfere substantially with the movement of any resident or migratory fish or wildlife species?	<u> </u>	<u>X</u>	<u> </u>
c. Require removal of substantial numbers of mature, scenic trees?	<u> </u>	<u>X</u>	<u> </u>

The EIR will contain discussion and analysis of the potential for the proposed project to affect local fish or wildlife, including rare or endangered species. The California Natural Diversity Data Base (CNDDB) maintained by the California State Department of Fish and Game will be consulted to determine if there are known rare or endangered species in the bay waters. The EIR will cover the need for any special permits required and current data on commercial species regulations. Mitigation measures will be included to protect species if required.

There are no existing trees on the piers. No further discussion will be required in the EIR.

9. Geology/Topography - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Expose people or structures to major geologic hazards (slides, subsidence, erosion and liquefaction)?	<u> </u>	<u>X</u>	<u>X</u>
b. Change substantially the topography or any unique geologic or physical features of the site?	<u> </u>	<u>X</u>	<u> </u>

* Derived from State EIR Guidelines, Appendix G, normally significant effect.

The project site is in a Special Geologic Study Area as shown in the Community Safety Element of the San Francisco Master Plan. This map indicates areas in which one or more geologic hazards exist. Reports on the geology of the land side of the project as well as the marine geology of the Bay are available in the project file. A geotechnical investigation report(prepared prior to the Loma Prieta earthquake) by a California-licensed geotechnical engineer is on file with the Department of City Planning and available for public review as part of the project file. /8/

Pre and post-quake status of Pier 45 and the four sheds located on it are also available for public review. /9/

There is an existing rock dike, remnant of an old pier foundation. It is east of the National Park and north of the existing concrete seawall. The subsurface materials are younger bay mud, bay side sand, older bay mud and Franciscan formation. Based on the exploration and laboratory tests performed for the proposed project and a review of geotechnical data pertinent to the area, it is the opinion of the geotechnical consultants that the harbor project is feasible. The major geotechnical considerations are foundation supports, rock dike stability, lateral resistance of piles, and seismic stability of the proposed structures. The soils underlying the site there have a low potential for soil liquefaction in a major seismic event. There are no indications that the site is underlain by any active or potentially active faults or that any such faults trend toward the site. The above cited reports contain recommendations regarding the size of piles to use for the foundations, and fill for the seawall and parking area which the project sponsor would incorporate into the final design for the facility.

The correction of earthquake damage at Pier 45, which included soils compaction of the fill portion of the Pier that was subject to liquefaction, makes expanded use of the existing sheds feasible. - /10/. Thus, there is no further need to discuss seismic and geologic issues in the EIR.

10. Water - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Substantially degrade water quality, or contaminate a public water supply?	<u>X</u>	<u> </u>	<u>X</u>
b.* Substantially degrade or deplete ground water resources, or interfere substantially with ground water recharge?	<u> </u>	<u>X</u>	<u>X</u>
c.* Cause substantial flooding, erosion or siltation?	<u> </u>	<u>X</u>	<u> </u>

A major focus of the EIR will be water quality. This will include analysis of the existing situation, any impact of the proposed project on water quality, and the measures that can be taken to avoid further water quality impacts. The EIR will describe and discuss relevant prior investigations of water quality.

Contamination of a public water supply will not be discussed in the EIR. It is not an issue because the bay is not a drinking water source.

The limited potential for effects on drainage, hydrology, and groundwater as a result of the proposed project will be discussed. The analysis will include consideration of the effects of erosion, sedimentation, added nitrates, biological oxygen demand, and other effects of runoff from the landside facilities into the Bay. This will include a discussion in the EIR of the placement of the new fill and potential construction impacts, such as increased turbidity in the Bay water.

Drainage patterns and groundwater recharge from increased impervious surfaces are not relevant issues. The proposed project does not include groundwater wells or increased pumping of groundwater; therefore, the EIR need not discuss depletion of groundwater resources as a result of the proposed project.

11. Energy/Natural Resources - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	<u> </u>	<u> X </u>	<u> X </u>
b. Have a substantial effect on the potential use, extraction, or depletion of a natural resource?	<u> </u>	<u> X </u>	<u> </u>

The proposed project would increase demand for and use of public services and utilities on the site and increase water and energy consumption, but not in excess of amounts expected and provided for in this area. Further discussion of these topics will not occur in the EIR.

12. Hazards - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Create a potential public health hazard or involve the use, production or disposal of materials which pose a hazard to people or animal or plant populations in the area affected?	<u> X </u>	<u> </u>	<u> X </u>
b.* Interfere with emergency response plans or emergency evacuation plans?	<u> </u>	<u> X </u>	<u> X </u>
c. Create a potentially substantial fire hazard?	<u> </u>	<u> X </u>	<u> X </u>

The EIR will evaluate the potential for the presence of soil and/or groundwater contamination due to the existing fuel storage tanks, and other potentially hazardous uses. The potential for Bay water contamination the potential for the generation of hazardous wastes as a result of project implementation will be discussed in the EIR, as well as the potential impact of the storage and use of hazardous materials.

The site is within the jurisdiction of San Francisco Public Works Code, Article 20, Sections 1000 through 1015, commonly known as the Maher Ordinance, and should 50 cubic yards or more be excavated, testing of all soil disturbed would be required using the Article 20 protocol. This requirement and procedure will be further discussed in the EIR.

The EIR will discuss existing emergency response plans in place within the police, fire, and Coast Guard services as well as the related infrastructure serving the site, particularly for fire protection. The adequacy of these services will be addressed in relation to the demands of the proposed project.

13. Cultural - Could the project:

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
a.* Disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community, ethnic or social group; or a paleontological site except as a part of a scientific study?	<u> </u>	<u> X </u>	<u> X </u>
b. Conflict with established recreational, educational, religious or scientific uses of the area?	<u> X </u>	<u> </u>	<u> X </u>
c. Conflict with the preservation of buildings subject to the provisions of Article 10 or (proposed) Article 11 of the City Planning Code?	<u> </u>	<u> X </u>	<u> X </u>

A cultural resources study has been prepared for the project and is available in the project file. /11/ The conclusions of the study are summarized here. The study is based on a review of historical literature and primary sources, and focuses on the potential existence of prehistoric or historic cultural resources below ground (or water) level which could be impacted by construction. Until the 1890s, the site was below the waterline of San Francisco Bay. It was largely filled between 1899 and 1929, much of the filling resulting from the disposal of rubble created by the earthquake and fire of 1906. A variety of industrial uses, maritime uses and recreational uses have been located in the area. The site area has been the focus of the San Francisco fishing industry since about 1900, when the industry's earlier location to the east, between Union and Lombard Streets was developed for general shipping.

The consultants identified several possible cultural resources which could exist on the project site and recommend a mitigation program to assure that any such resources which may be discovered during the course of construction can be identified and recovered or recorded as appropriate. It is possible that a shell mound (or portions of a shellmound) which was reported in 1861 as being near the project site still exists. The wreck of the Tonquin was shown on an 1853 map north of Jefferson Street near Leavenworth which is within the project site. Rubble from the 1906 earthquake was used to fill the site. These secondary deposits could yield artifacts of interest to scholars and the public. Materials from 19th century industry could exist on the project site. Because of these potential cultural resources, the consultants recommend that archaeological monitoring should be conducted whenever subsurface construction is undertaken in the project area. This program of archaeological monitoring, which would mitigate the potentially significant impacts of the project on cultural resources, is included by the Project Sponsor and is described in more detail in the section "Mitigation Measures Proposed as Part of the Project".

The San Francisco Maritime National Historic Park leases its space on the Hyde Street Pier from the Port. The Park holds two National Register properties on or near the project site. The Tubbs Cordage Company Office was built around 1890 at 611 Front Street. It was moved to its present location, about 10 to 15 feet west of the original site, in 1963. The Lewis Ark is a houseboat which was probably built in Belvedere or Tiburon in the early 1900s. It was moved to the Hyde Street Pier from Belvedere in 1969. It sits on the boundary of the site. Both of these structures would be moved to another location within the leasehold of the San Francisco Maritime National Historic Park as a result of the Project./12/ These wood frame structures would not be structurally affected by this move. Because both of these buildings were moved to their present locations in the 1960s, their historic value does not result from their current location, although their value is greater in a waterfront setting, which they will continue to possess. The project would not result in significant impacts on these historic resources. Several of the historic ships which are part of the San Francisco Maritime National Historic Park collection at the Hyde Street Pier are also on the National Register of Historic Places. The ships and the physical structures in the Maritime Park would not be adversely impacted by the project.

As an expansion of the existing fishing services facilities, the project is viewed as one that could conflict with established recreational uses of the water in the vicinity. The swimming and boating clubs located nearby believe the potential for additional water quality degradation would be hazardous to their members. The Golden Gate National Recreation Area borders the site and there are other educational institutions in the local area that have plans to expand their activities. Issues related the proposed uses of the site and potential conflicts with the recreational, educational, and scientific uses of the site and the surrounding waters, require further discussion in the EIR.

Several other potentially historic buildings are located within the project site, and were identified in the Northern Waterfront Findings Report and subsequent research by the Department of City Planning./13/ The bulkhead building and sheds at Pier 45 were built in 1929. Several buildings on Fish Alley were built in the early 1900s. The bulkhead building and shed at Pier 45 are rated 4 in the Department of City

Planning's 1976 Architectural Survey. /14/ These buildings are characteristic of historical maritime uses in the area. None of these buildings would be demolished or substantially altered as a result of the project.

C. OTHER

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
Require approval of permits from City Departments other than Department of City Planning or Bureau of Building Inspection or from Regional, State or Federal Agencies?	<u>X</u>	<u> </u>	<u>X</u>

The EIR will discuss all known project-related reviews, permits, and approvals, and the affected permitting and responsible agencies, including but not limited to the United States Army Corps of Engineers, BCDC, Regional Water Quality Control Board, United States Coast Guard, and the State of California Boating and Waterways.

D. MITIGATION MEASURES PROPOSED AS PART OF THE PROJECT:

	<u>Yes</u>	<u>No</u>	<u>N/A</u>	<u>Discussed</u>
1. Could the project have a significant effect if mitigation measures are not included in the project?	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>
2. Are all mitigation measures necessary to eliminate significant effects included in the project?	<u> </u>	<u>X</u>	<u> </u>	<u>X</u>

1. Cultural Resources Mitigation Measure. Given the strong possibility of encountering the remains of cultural or historic artifacts or features within the project site, the sponsor would retain the services of an archaeologist(s) with expertise in both prehistoric and ethnographic materials and maritime history. The archaeologist would supervise a program of on-site monitoring during site excavation and would record observations in a permanent log. Should cultural or historic artifacts be found following commencement of excavation activities, the archaeologist would assess the significance of the find, and immediately report to the ERO and the President of the LPAB. Upon receiving the advice of the consultants and the LPAB, the ERO would recommend specific mitigation measures, if necessary. The monitoring program, whether or not there are finds of significance would result in a written report to be submitted first and directly to the ERO, with a copy to the project sponsor.

Excavation or construction activities which might damage discovered cultural resources would be suspended for a total maximum of four weeks over the course of construction to permit inspection, recommendation and retrieval, if appropriate.

If cultural resources of potential significance are discovered, an appropriate security program would be implemented to prevent looting or destruction. Any discovered cultural artifact assessed as significant by the archaeologist upon concurrence by the ERO and the President of the LPAB, would be placed in a repository designated for such materials or displayed in a public place to be determined in conjunction with the ERO and the President of the LPAB.

Some elements of the proposed project are designed to avoid adverse environmental effects. These elements will be discussed and identified in the EIR as elements of the proposed project. The EIR will contain a mitigation chapter describing these measures and also including other measures which would be or could be adopted to reduce potential adverse effects of the project identified in the EIR.

E. ALTERNATIVES

Alternatives to the proposed project will be defined further and described in the EIR. At a minimum, alternatives analyzed will include the following:

- The No Project Alternative.
- An alternative designed with fewer berths and less parking, and fewer new uses in the sheds on Pier 45.
- Alternative site(s). An evaluation of whether alternative sites for certain portions of the project are feasible will be provided. Such sites may include building new facilities at an alternative location. The extent to which utilization of other sites would mitigate any significant environmental impacts will be discussed.

E. MANDATORY FINDINGS OF SIGNIFICANCE

	<u>Yes</u>	<u>No</u>	<u>Discussed</u>
1.* Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or pre-history?	<u>X</u>	<u> </u>	<u>X</u>
2.* Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<u> </u>	<u>X</u>	<u>X</u>
3.* Does the project have possible environmental effects which are individually limited, but cumulatively considerable? (Analyze in the light of past projects, other current projects, and probable future projects.)	<u>X</u>	<u> </u>	<u> </u>
4.* Would the project cause substantial adverse effects on human beings, either directly or indirectly?	<u> </u>	<u>X</u>	<u> </u>

The project would contribute to cumulative development impacts at Fisherman's Wharf, primarily in the areas of transportation and water quality. Applicable cumulative impacts will be discussed in the EIR. The EIR will address the potential for adverse environmental effects for the areas of study discussed in Section B of this Initial Study.

G. ON THE BASIS OF THIS INITIAL STUDY

- I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Department of City Planning.
- I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because the mitigation measures, numbers , in the discussion have been included as part of the proposed project. A NEGATIVE DECLARATION will be prepared.
- X I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Barbara W. Sahm

BARBARA W. SAHM
Environmental
Review Officer
for
Lucian R. Blazej
Director of Planning

Date: 7/7/94

* Derived from State EIR Guidelines, Appendix G, normally significant effect.

IV. DISTRIBUTION LIST

FEDERAL AGENCIES

United States Army Corps of Engineers, San Francisco District
United States Fish and Wildlife Service
United States General Services Administration
United States Maritime Administration, Western Region
United States National Park Service
Golden Gate National Recreation Area
United States Coast Guard

STATE AGENCIES

California Department of Fish and Game
California Archaeological Inventory - Northwest Information Center
Department of Boating and Waterways
State Office of Intergovernmental Management
State Lands Commission

REGIONAL AGENCIES

Association of Bay Area Governments
Bay Area Air Quality Management District
Bay Conservation and Development Commission
Regional Water Quality Control Board
California Coastal Conservancy
Save San Francisco Bay

CITY AND COUNTY OF SAN FRANCISCO

Landmarks Preservation Advisory Board
Recreation and Park Department
San Francisco Redevelopment Agency
San Francisco Fire Department Division of Planning and Research

OTHER AGENCIES

County of San Mateo Planning Department
San Mateo County Harbor District
Port of Oakland

LIBRARIES

San Francisco Main Library

ADJACENT PROPERTY OWNERS and CITIZEN ADVISORY GROUPS

See List in Project File #93.574E

MEDIA

San Francisco Examiner
San Mateo Times
San Francisco Independent

PLEASE NOTE THAT FIGURES 1 THROUGH 5 WERE PRODUCED BY THE TEAM OF MOFFATT & NICHOL/AGS,INC/KWAN HENMI/STEVENS & ASSOC. IN 1988 for the Port of San Francisco.

NOTES TO TEXT:

1. Moffatt & Nichol, Engineers did an analysis of the Pier for the National Park Service, San Francisco Maritime N.H.P.. The report: "Hyde Street Pier Architectural and Engineering Study" is in the Planning Department file and documents the status of the Pier and what needed to be done to it in March of 1990 for Maritime Park use.
2. Moffat & Nichols, AGS Inc., Kwan Henmi Architects, Fisherman's Wharf Feasibility Study, June 1988.
3. FEMA Project - Pier 45, Note to File by Catherine Bauman, October 26, 1990.
4. Conversation with Port Representative, Dan Hoddap - October 21, 1993
5. Information derived from earlier studies done for the Fisherman's Wharf Area Plan.
6. Information provided in a telephone conversation with the Assistant Harbormaster for Pier 39 on March 3, 1994.
7. Bendix Environmental Research Inc., Fisherman' Wharf Seafood Center Noise Report, August 4, 1989. dBA is a measure of sound in units of decibels (dB). The "A" denotes the A-weighted scale, which simulates the response of the human ear to various frequencies of sound.
8. Fisherman's Wharf Harbor Geotechnical Investigation Report, prepared by AGS, Inc for the Port of San Francisco, June 1, 1988.
9. Need to get titles for geotechnical reports done for the Pier 45 work.
10. Pier 45 Geotechnical Reports - earthquake damage and reconstruction
11. Laurence H. Shoup and Suzanne Baker, A Cultural Resources Overview of the Fisherman's Wharf Seafood Center Project Area and Environs, March 1989.
12. Michael Bell, Project Manager, San Francisco Maritime National Historical Park, telephone conversation, March 30, 1994.
13. Department of City Planning, Northern Waterfront Findings Report, March 1987.
14. The San Francisco Department of City Planning conducted a citywide inventory of architecturally significant buildings in 1976. Buildings were awarded a rating for architectural merit ranging from a low of "0" to a high of "5". In the opinion of those who conducted the survey, the best 10% of the City's buildings were included in the survey, and those rated "3" to "5" represent 2% of the City's building stock.

APPENDIX B.
WATER QUALITY AND SEDIMENT QUALITY DATA, OIL SPILL NOTIFICATION

TABLE 1. WATER QUALITY SAMPLING DATA FOR HYDE STREET HARBOR/PIER 45, May 1995

Parameter	Units	Reporting Limit	Sampling Results, May 10, 1995								Basin Plan Water Quality Objectives*	EPA Water Quality Standards**	Regional Monitoring Program***
			Station 1 Inner Lagoon	Station 2 Outer Lagoon	Station 3 Main Basin (Outer Harbor)	Station 4 Aquatic Park	Station 4 Aquatic Park (Dup)	Station 5 West of Municipal Pier	Station 6 Northeast of Breakwater				
Conventional													
Temperature (field data)	deg. C		15	14.8	15.1	15.1		15	15	(a)		17	
Salinity (field data)	ppt		11	11	11	11		14	10	(a)		28	
pH (field data)	units		7.79	7.92	7.88	7.81		7.93	7.81	6.5 - 8.5		7.9	
Turbidity	NTU	1	4.3	5.1	4.8	5	5	5.3	6.2	(a)		--	
Total Suspended Solids	mg/L	4	ND	ND	ND	ND	ND	ND	ND	(a)		3.8	
Biochemical Oxygen Demand, 5-day	mg/L		22	17	11	12	11	15	17	none		--	
Bacteria													
Total Coliform	MPN/100 ml	2	300	500	1600	50	30	30	13	<1,000 (b)		--	
Fecal Coliform	MPN/100 ml	2	80	300	50	13	8	17	8	log mean<200 (b)		--	
Enterococci	MPN/100 ml	2	34	50	23	<2	2	<2	2	35 (c)		--	
Nutrients													
Ammonia Nitrogen, Total	mg/L		0.11	0.12	0.10	0.09	0.10	0.10	0.09	0.16 (d)			
Metals - Total Recoverable													
Arsenic	ug/L	1	2.0	2.0	2.1	2.1	2.3	2.3	2.2	36 (e)		1.72	
Cadmium	ug/L	0.2	ND	ND	ND	ND	ND	ND	ND	9.3 (e)		0.067	
Chromium, Total	ug/L	1	ND	ND	ND	ND	ND	ND	ND	50 (e)		1.27	
Copper	ug/L	1	4.6	3.7	3.9	3.4	3.8	3	3.1	(f)		2.02	
Lead	ug/L	1	ND	ND	ND	ND	ND	ND	ND	5.6 (e)		0.35	
Mercury	ug/L	0.2	ND	ND	ND	ND	ND	ND	ND	0.025 (e)		0.004	
Nickel	ug/L	2	2.6	2.7	2.6	2.2	2.6	2.4	2.5	7.1 (g)		1.8	
Selenium	ug/L	0.2	ND	ND	ND	ND	ND	ND	ND	(h)		0.22	
Silver	ug/L	0.2	ND	ND	ND	ND	ND	ND	ND	2.3 (i)		0.068	
Zinc	ug/L	1	12	14	15	8.1	8.3	9.5	8.1	58 (g)		2.89	
Metals - Dissolved													
Arsenic	ug/L	1	1.6	1.5	1.5	1.4	1.2	1.4	1.2		36	1.63	
Cadmium	ug/L	0.2	ND	ND	ND	ND	ND	ND	ND		9.3	0.064	
Chromium, Total	ug/L	1	ND	ND	ND	ND	ND	ND	ND		50	0.09	
Copper	ug/L	1	3.2	2.2	2.2	2.3	2.2	1.9	1.8		2.4	1.02	
Lead	ug/L	1	ND	ND	ND	ND	ND	ND	ND		8.1	0.009	
Mercury	ug/L	0.2	ND	ND	ND	ND	ND	ND	ND		0.025	0.001	
Nickel	ug/L	2	5.7+	ND	ND	ND	ND	ND	ND		8.2	1.02	
Selenium	ug/L	0.2	ND	ND	ND	ND	ND	ND	ND		71	0.19	
Silver	ug/L	0.2	ND	ND	ND	ND	ND	ND	ND		1.9	0.002	
Zinc	ug/L	1	5.2	7.9	3.7	1.7	4.3	1.4	1.1		81	0.58	
Organics													
Polynuclear Aromatic Hydrocarbons	ng/L	(MDL)								15,000 (j)			
Naphthalene	ng/L	7.38	41.3 U	43.1 U	88.1	27.2 U	31.4 U	28.0 U	31.2 U		--		
Acenaphthylene	ng/L	11.4	ND	ND	ND	ND	ND	ND	ND		--		
Acenaphthene	ng/L	11	ND	22.4 J	17.1 J	12.2 J	22.1 J	11.8 J	33.8 J		--		

Parameter	Units	Reporting Limit	Station 1 Inner Lagoon	Station 2 Outer Lagoon	Station 3 Main Basin (Outer Harbor)	Station 4 Aquatic Park	Station 4 Aquatic Park (Dup)	Station 5 West of Municipal Pier	Station 6 Northeast of Breakwater	Basin Plan Water Quality Objectives*	EPA Water Quality Standards**	Regional Monitoring Program***
(j) Polynuclear aromatic hydrocarbons (PAHs) are those compounds identified by EPA Method 610. The U.S. EPA criterion indicates that 31 ng/L is protective of human health. based on an acceptable lifetime cancer risk of one in one million.												
(k) No value listed in 1995 Basin Plan Update, Table III-3, for tributyltin. Based on technical information, 5 ng/L (30-day average) would be protective of human health.												
Dup = Duplicate Sample												
ND = Not Detected, below reporting limit												
NTU = Nephelometric Turbidity Unit												
MPN = Most Probable Number												
MDL = Method Detection Limit												
ppt = parts per thousand												
mg/L = milligram per liter or parts per million												
ug/L = microgram per liter or parts per billion												
ng/L = nanogram per liter or parts per trillion												
U = Qualified result for concentrations less than 5 times the method blank concentration												
J = Estimated value: concentration below the practical quantitation limit but above the method detection limit.												
Shaded value in bold indicates value exceeds regulatory objective or standard, although single data point cannot be directly compared to objective or standard, which is based on an average value over a defined period.												
SOURCE: Woodward-Clyde Consultants, 1995; Calif. Regional Water Quality Control Board, 1995; U.S. EPA, 1992 and 1995; SF Estuary Inst., 1994, and Orion Environmental Associates, 1995.												

TABLE 2

SUMMARY OF SEDIMENT CHARACTERIZATION
Fisherman's Wharf- Port of San Francisco
Sampled 9/1/1994

Analyte (1)	Site	OUTER HARBOR	OUTER LA GOON	Alcatraz Reference	Detection	Limit
		FW-1	FW-2		Achieved (2)	Required (3)
Grain size (%)						
Gravel		0.0	0.6	7.8		
Sand		9.2	40.3	90.7		
Silt		45.3	28.9	0.5		
Clay		45.5	30.1	1.0		
Solids (%) (Dry Wt.)		49.2	51.9	84.9		0.1
<u>Sulfides (mg/kg)</u>						
Total		199	182	<1.2	0.1	0.5
Water Soluble		<0.2	<0.2	<0.1	0.1	0.1
Total Organic Carbon (%)		1.17	0.84	0.06		0.1
TRPH (mg/kg)		43.7	48.9	88.5	1.0	0.1
<u>Organotins (ug/kg)</u>						
Tetrabutyltin		3.05	<1.9	<1.2	1.0	1.0
Tributyltin		<2.0	2.93	<1.2	1.0	1.0
Dibutyltin		<2.0	<1.9	<1.2	1.0	1.0
Monobutyltin		<2.0	<1.9	<1.2	1.0	1.0
<u>Metals (mg/kg)</u>						
Arsenic (As)		8.13	7.51	5.21		0.1
Cadmium (Cd)		0.368	0.509	<0.024		0.1
Chromium (Cr)		69.9	66.7	22.4		0.1
Copper (Cu)		45.9	41.6	3.67		0.1
Lead (Pb)		27.4	32.2	7.16		0.1
Mercury (Hg)		0.240	0.362	0.038		0.2
Nickel (Ni)		71.5	59.3	21.6		0.1
Selenium (Se)		<2.03	<1.93	<1.18	1.0	0.1
Silver (Ag)		<0.081	<0.077	<0.047	0.04	0.1
Zinc (Zn)		103	98.3	4.51		0.1
<u>Pesticides and PCBs (ug/kg)</u>						
4,4' - DDD		ND	ND	ND	2	2
4,4' - DDE		ND	ND	ND	2	2
4,4' - DDT		ND	ND	ND	2	2
Aldrin		ND	ND	ND	2	2
alpha-BHC		ND	ND	ND	2	2
beta BHC		ND	ND	ND	2	2
Chlordane		ND	ND	ND	25	25
Delta-BHC		ND	ND	ND	2	2
Dieldrin		ND	ND	ND	2	2
Endosulfan I		ND	ND	ND	2	2
Endosulfan II		ND	ND	ND	2	2
Endosulfan Sulfate		ND	ND	ND	25	25
Endrin		ND	ND	ND	2	2
Endrin Aldehyde		ND	ND	ND	10	10
Heptachlor		ND	ND	ND	2	2
Heptachlor Epoxide		ND	ND	ND	10	10
Lindane		ND	ND	ND	2	2
Methoxychlor		ND	ND	ND	25	25
Toxaphene		ND	ND	ND	25	25
PCB Arochlor 1016		ND	ND	ND	20	20
PCB Arochlor 1221		ND	ND	ND	20	20
PCB Arochlor 1232		ND	ND	ND	20	20
PCB Arochlor 1242		ND	ND	ND	20	20
PCB Arochlor 1248		ND	ND	ND	20	20
PCB Arochlor 1254		ND	ND	ND	20	20
PCB Arochlor 1260		ND	ND	ND	20	20

(1) All chemical analyses are given as dry weight basis unless noted.

(2) Detection limits are given as wet weight basis since the dry weight values are arithmetically derived.

(3) Detection limits required by ACOE.

Advanced Biological Testing Inc.

TABLE 2 (Cont'd)

SUMMARY OF SEDIMENT CHARACTERIZATION
Fisherman's Wharf- Port of San Francisco
Sampled 9/1/1994

Analyte (1)	Site	OUTER HARBOR FW-1	OUTER LAGOON FW-2	Alcatraz Reference	Detection Achvd (2)	Limit Reqd (3)
PAHs (µg/kg)						
Naphthalene		ND	ND	ND	20	20
Acenaphthylene		ND	ND	ND	20	20
Acenaphthene		ND	ND	ND	20	20
Fluorene		ND	ND	ND	20	20
Phenanthrene		70.7	73.2	258	20	20
Anthracene		ND	52.0	76.8	20	20
Fluoranthene		143	229	237	20	20
Pyrene		182	391	350	20	20
Benzo (A) Anthracene		75.0	128	144	20	20
Chrysene		84.6	158	140	20	20
Benzo (B) Fluoranthene		ND	109	51.1	20	20
Benzo (K) Fluoranthene		ND	183	67.1	20	20
Benzo (A) Pyrene		ND	173	93.1	20	20
Dibenzo (A,H) Anthracene		ND	ND	ND	20	20
Ideno (1,2,3-CD) Pyrene		ND	ND	ND	20	20
Benzo (G,H,I) Perylene		ND	ND	ND	20	20
Total		555.3	1496.2	1417.1		
Phthalate Esters (µg/kg)						
Bis (2-ethylhexyl) Phthalate		ND	ND	ND	50	20
Butylbenzyl Phthalate		ND	ND	ND	8.5	20
Di-n-butyl Phthalate		ND	ND	ND	9	20
Diethyl Phthalate		ND	ND	ND	12	20
Dimethyl Phthalate		ND	ND	ND	7.3	20
Di-n-octyl Phthalate		ND	ND	ND	75	20
Total		0	0	0		

Initial Ammonia

Final Ammonia

- (1) All chemical analyses are given as dry weight basis unless noted.
- (2) Detection limits are given as wet weight basis since the dry weight values are arithmetically derived.
- (3) Detection limits required by ACOE.

TABLE 2 (Cont'd)

SUMMARY OF SEDIMENT CHARACTERIZATION
 Fisherman's Wharf- Port of San Francisco
 Sampled 10/28/94

		OUTER HARBOR	OUTER LAGOON		
Analyte (1)	Site	FW-1	FW-2	Detection	Limit
				Achieved (2)	Required (3)
Grain size (%)					
Gravel		1.3	0.6/1.2		
Sand		10.6	23.0/27.4		
Silt		45.9	38.9/34.5		
Clay		42.2	37.5/37.0		
Solids (%) (Dry WL)		53.5	54.4		0.1
Sulfides (mg/kg)					
Total		198	224	0.1	0.5
Water Soluble		<0.2	<0.2	0.1	0.1
Total Organic Carbon (%)		1.19	1.03		0.1
TRPH (mg/kg)		77.9	95.8	1.0	0.1
Organotins (ug/kg)					
Tetrabutyltin		<1.9	<1.8	1.0	1.0
Tributyltin		<1.9	3.68	1.0	1.0
Dibutyltin		<1.9	<1.8	1.0	1.0
Monobutyltin		<1.9	<1.8	1.0	1.0
Metals (mg/kg)					
Arsenic (As)		8.41	7.46		0.1
Cadmium (Cd)		0.538	0.625		0.1
Chromium (Cr)		69.5	64.0		0.1
Copper (Cu)		49.3	49.3		0.1
Lead (Pb)		33.5	36.6		0.1
Mercury (Hg)		0.314	0.393		0.2
Nickel (Ni)		66.2	57.4		0.1
Selenium (Se)		<1.87	<1.84	1.0	0.1
Silver (Ag)		0.247	0.325		0.1
Zinc (Zn)		115	116		0.1
Pesticides and PCBs (ug/kg)					
4,4' - DDD		ND	ND	2	2
4,4' - DDE		ND	ND	2	2
4,4' - DDT		ND	ND	2	2
Aldrin		ND	ND	2	2
alpha-BHC		ND	ND	2	2
beta BHC		ND	ND	2	2
Chlordane		ND	ND	25	25
Delta-BHC		ND	ND	2	2
Dieldrin		ND	ND	2	2
Endosulfan I		ND	ND	2	2
Endosulfan II		ND	ND	2	2
Endosulfan Sulfate		ND	ND	25	25
Endrin		ND	ND	2	2
Endrin Aldehyde		ND	ND	10	10
Heptachlor		ND	ND	2	2
Heptachlor Epoxide		ND	ND	10	10
Lindane		ND	ND	2	2
Methoxychlor		ND	ND	25	25
Toxaphene		ND	ND	25	25
PCB Arochlor 1016		ND	ND	20	20
PCB Arochlor 1221		ND	ND	20	20
PCB Arochlor 1232		ND	ND	20	20
PCB Arochlor 1242		ND	ND	20	20
PCB Arochlor 1248		ND	ND	20	20
PCB Arochlor 1254		ND	ND	20	20
PCB Arochlor 1260		ND	ND	20	20

(1) All chemical analyses are given as dry weight basis unless noted.

(2) Detection limits are given as wet weight basis since the dry weight values are arithmetically derived.

(3) Detection limits required by ACOE.

Advanced Biological Testing Inc.

TABLE 2 (Cont'd)

SUMMARY OF SEDIMENT CHARACTERIZATION
Fisherman's Wharf- Port of San Francisco
Sampled 10/28/94

		OUTER HARBOR	OUTER LAGOON		
Analyte (1)	Site	FW-1	FW-2	Detection Achvd (2)	Limit Reqd (3)
<u>PAHs (µg/kg)</u>					
Naphthalene		ND	ND	20	20
Acenaphthylene		49.5	ND	20	20
Acenaphthene		ND	ND	20	20
Fluorene		ND	ND	20	20
Phenanthrene		200	ND	20	20
Anthracene		86.5	ND	20	20
Fluoranthene		308	50.2	20	20
Pyrene		439	82.4	20	20
Benzo (A) Anthracene		139	ND	20	20
Chrysene		165	ND	20	20
Benzo (B) Fluoranthene		113	ND	20	20
Benzo (K) Fluoranthene		189	ND	20	20
Benzo (A) Pyrene		222	ND	20	20
Dibenzo (A,H) Anthracene		ND	ND	20	20
Ideno (1,2,3-CD) Pyrene		132	ND	20	20
Benzo (G,H,I) Perylene		175	ND	20	20
Total		2218	132.6		
<u>Phthalate Esters (µg/kg)</u>					
Bis (2-ethylhexyl) Phthalate		204	210	50	20
Butylbenzyl Phthalate		ND	ND	8.5	20
Di-n-butyl Phthalate		126	134	9	20
Diethyl Phthalate		ND	ND	12	20
Dimethyl Phthalate		ND	ND	7.3	20
Di-n-octyl Phthalate		ND	ND	75	20
Total		330	344		

(1) All chemical analyses are given as dry weight basis unless noted.

(2) Detection limits are given as wet weight basis since the dry weight values are arithmetically derived.

(3) Detection limits required by ACOE.

Oil Spill Notification List

For Very Large Oil Spills:

Notify local response coordinator, Battalion Chief No. 2 at 911 or (415) 861-8000 or (415) 861-8020. Battalion Chief will decide whether to activate incident command system. Battalion Chief will make all other necessary notifications.

For Smaller Oil Spills or Oil Spill In Which U.S. Coast Guard or another governmental agency is the first responder:

FEDERAL NOTIFICATIONS

1. U.S. Coast Guard Marine Safety Office
(510) 437-3073
2. National Response Center
(800) 424-8802
3. U.S. EPA, Region IX
(415) 974-8131 OR
Spill Phone: (415) 774-2000
4. Chem-Trec (Optional, for information on haz. mats.)
(800) 424-9300

STATE NOTIFICATIONS

1. Office of Emergency Services (OES)
(800) 852-7550
2. Department of Fish and Game, OSPRE
(916) 445-9338
(800) 852-7550
3. California Regional Water Quality Control Board,
Region 2
(510) 286-1255

NOTE: MAKE NOTIFICATIONS OVER THE PHONE AS SOON AS POSSIBLE AFTER YOU BECOME AWARE OF THE INCIDENT. PROVIDE INFORMATION ON ATTACHED SHEET. INFORM ENVIRONMENTAL DEPARTMENT STAFF OF THE INCIDENT SO THAT PORT CAN SUBMIT THE REQUIRED FOLLOW UP REPORTS.

TAB B: EMERGENCY NOTIFICATION INFORMATION

As soon as an oil discharge is known, the Local Response Coordinator is to make the necessary notifications to the relevant agencies and organizations on the notification list depending on the nature and location of the spill. The Local Response Coordinator should provide enough information for the contact persons to be prepared for response operations specific to the spill and to respond in a timely manner. This information should be reported, if known, to the appropriate agencies/response personnel on the contact list and would include, but not limited to, the following:

1. Caller's name, position, and phone number to call back for more information; location of the spill
2. Location of the spill
3. Date and time of the spill
4. Type of material
5. Estimated size of the spill
6. Status of the spill and response actions that have been taken (abatement/control measures)
7. Source and cause of the spill
8. Potential public health and safety issues and environmental damages
9. Weather and seastate conditions
10. Immediate needs and proper precautions to take at the spill site
11. Name of the Potential Responsible Party (PRP) and phone number, if known
12. Other agencies or response personnel that have already been notified of the spill.

POTENTIAL WATER QUALITY EFFECTS ON MARINE BIOTA

MEC Analytical Systems conducted a review of the 1995 sampling results with respect to potential water quality effects on marine biota and specifically those chemicals of most concern to marine organisms,¹ as summarized below.

The chemicals that were sampled and analyzed for in the project area that are of potential concern to marine organisms based on the concentrations measured include copper, tributyltin, benzo(a)anthracene, and chrysene. In general, the measured concentrations of these chemicals would not be expected to be harmful to marine organisms, as discussed below.

The dissolved copper concentration was measured at 3.2 ug/L in the Inner Lagoon and 2.8 ug/L in Aquatic Park, both exceeding the current U.S. EPA standard of 2.4 ug/L (both as the criterion maximum concentration and the criterion continuous concentration). However, the measured concentrations are not at a level expected to be toxic to marine organisms. The Clean Water Act is currently under revision, and the U.S. EPA is considering revising the saltwater copper criteria to 4.8 ug/L (criterion maximum concentration dissolved copper) and 3.1 ug/L (criterion continuous concentration dissolved copper).²

Tributyltin was detected above the reporting limit (13 ng/L) in the Inner Lagoon, but was less than the reporting limit of 5 ng/L at the other five sampling stations. Although the current Basin Plan has no water quality objective listed for tributyltin, the Basin Plan does indicate that 5 ng/L (30-day average) would be protective of human health. Tributyltin has been found to be one of the most toxic synthetic chemicals known for some marine life and is acutely toxic to marine organisms at concentrations as low as 100 ng/L. The concentrations measured in the project area in May 1995 were below the level that would be expected to affect the mortality of marine life. Chronic effects to marine organisms have been observed at concentrations of 9 ng/L (including impacts to the development of reproductive organs in juvenile mud snails, *Nucella lapillus*), 10 ng/L (affecting egg production in adult copepods, *Acartia tonsa*), and 20 ng/L (inhibiting growth in oyster spat, *Crassostrea gigas*). Greater effects occur at concentrations of 100 to 200 ng/L.³ Thus, some sublethal effects to marine organisms could occur in the Inner Lagoon due to the

¹ MEC Analytical Systems, 1995. Marine Biota Setting and Environmental Consequences of Water Quality, San Francisco Pier 45 Project. March, July and August, 1995.

² Federal Register, Volume 60, No. 86, Thursday, May 4, 1995. Rules and Regulations. 40 CFR 131.

³ State Water Resources Control Board, 1988. Tributyltin: A California Water Quality Assessment. Division of Water Quality, Report No. 88-12. December 1988.

presence of tributyltin in the range of the concentration measured.

Benzo(a)anthracene was not detected in concentrations above the method detection limit of 5.42 ng/L. The U.S. EPA criteria for benzo(a)anthracene for protection of human health (based on a one in a million risk for carcinogen) are 2.8 ng/L for consumption of water and organisms and 31 ng/L for consumption of organisms only. Acute toxicity of benzo(a)anthracene to aquatic organisms has been demonstrated at concentrations of approximately 1 to 2 ppm (1 to 2 million ng/L). *Lepomis macrochirus* (bluegill) exposed to 1 ppm (1 million ng/L) benzo(a)anthracene for six months showed 87 percent mortality.⁴ In a study on photo-induced toxicity of PAHs to larvae of the fathead minnow (*Pimephales promelas*), concentrations of 1.8 ppm (1.8 million ng/L) benzo(a)anthracene resulted in a LC₅₀ (lethal concentration in which 50 percent of the test population exhibited lethal effects) at 65.1 hours.⁵ Accumulation effects would be expected to occur at lower concentrations. The polychaete *Nereis virens* exposed to water contaminated with 0.075 to 0.102 ppm (75,000 to 102,000 ng/L) benzo(a)anthracene accumulated and metabolized this PAH.⁶ Results of these studies indicate that levels of benzo(a)anthracene measured in the project area are lower by several orders of magnitude than those likely to harm aquatic organisms.

Chrysene was detected at one station at a concentration of 6.8 ng/L (or 0.0000068 ppm). The U.S. EPA criteria for chrysene for protection of human health (based on a 10⁻⁶ risk for carcinogen) are 2.8 ng/L for consumption of water and organisms and 31 ng/L for consumption of organisms only. In a study by Rossi and Neff (1978),⁷ immature specimens of the sediment-dwelling marine worm *Neanthes arenaceodentata* were exposed to concentrations of 1 ppm chrysene. Lethal effects (50 percent mortality in 96 hours) were not observed for this compound. Toxicity of the various PAHs tested in the study appeared to be related to their solubility in water. The lack of acute toxicity exhibited by chrysene may be related to its relatively low solubility in water. Although few studies are available on toxicity of chrysene to marine organisms, information from the Rossi and Neff study suggest that concentrations of chrysene measured in the project area are not harmful to benthic marine organisms.

⁴ Brown, E.R., L. Keith, J.J. Hazdra, and T. Arndt, 1973. Tumors in fish caught in polluted waters: Possible explanations. Bibl. Haematol. 40: 47-57.

⁵ Oris, J.T., and J.P. Giesy, Jr., 1987. The photo-induced toxicity of polycyclic aromatic hydrocarbons to larvae of the fathead minnow (*Pimephales promelas*). Chemosphere 16: 1395-1404.

⁶ McElroy, A.E., 1990. Polycyclic aromatic hydrocarbon metabolism in the polychaete *Nereis virens*. Aquat. Toxicol. 18:35-50.

⁷ Rossi, S.S., and J.M. Neff, 1978. Toxicity of polynuclear aromatic hydrocarbons to the polychaete *Neanthes arenaceodentata*. Mar. Pollut. Bull. 9:220-223.

SF BAY AREA COMMERCIAL FISH LANDINGS
Dept. of Fish & Game Statistics for Select Species (Table 15)

11-30-95 commfish

Species	1988		1989		1990		1991		1992		1993		1994	
	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value
Anchovy, Northern	1,085,448	\$122,538	1,665,190	\$162,526	1,573,980	\$153,145	1,012,330	\$108,090	362,430	\$34,406	537,736	\$108,972	616,472	\$83,107
Halibut, California	136,302	\$313,393	175,873	\$409,983	170,923	\$419,040	261,142	\$628,562	341,041	\$818,387	319,331	\$783,024	273,436	\$694,585
Herring, Roe on Kelp	15,877	\$31,755	87,584	\$175,117	185,750	\$1,525,370	143,971	\$1,253,960	127,872	\$702,725	-	-	67,755	\$109,376
Herring, Pacific	18,860,038	\$5,533,969	20,309,114	\$4,422,116	15,915,100	\$6,827,150	15,740,200	\$8,212,330	13,716,500	\$9,424,790	8,358,940	\$2,016,940	6,313,210	\$2,814,910
Lingcod	518,757	\$206,705	700,362	\$295,908	732,365	\$288,090	642,783	\$257,210	390,191	\$171,027	598,371	\$259,715	458,021	\$215,439
Rockfish, Bocaccio	807,759	\$295,732	667,982	\$237,931	1,494,490	\$489,491	811,023	\$265,300	676,128	\$246,983	707,250	\$259,235	379,794	\$149,289
Rockfish, Chilipepper	823	\$463	10,172	\$3,411	2,474	\$889	1,488,830	\$487,389	2,474,500	\$860,801	1,291,760	\$477,675	1,215,680	\$523,765
Rockfish, Group Red	208,230	\$128,484	213,928	\$160,073	457,796	\$255,927	574,297	\$319,804	452,583	\$299,868	327,542	\$238,248	279,756	\$188,067
Rockfish, Unspecified	3,389,304	\$1,252,206	3,111,485	\$1,094,912	5,132,830	\$1,793,390	2,617,510	\$1,041,830	2,072,060	\$893,573	1,840,850	\$867,833	714,033	\$304,560
Rockfish, Widow	747,963	\$238,614	608,046	\$161,799	1,484,180	\$422,939	922,635	\$273,598	855,716	\$267,104	408,685	\$130,635	263,305	\$98,210
Sablefish	2,291,971	\$1,083,690	2,937,018	\$1,313,176	2,053,090	\$823,882	1,772,810	\$826,969	1,473,660	\$766,912	1,000,980	\$400,931	754,237	\$493,891
Salmon, Chinook	7,149,907	\$20,393,747	2,519,621	\$6,025,545	1,882,300	\$5,203,210	1,682,840	\$4,336,800	992,615	\$2,738,970	1,347,930	\$3,012,050	2,185,460	\$4,531,370
Sanddab	603,094	\$207,307	782,490	\$238,095	760,068	\$231,304	879,531	\$304,000	426,240	\$157,276	503,650	\$234,458	826,885	\$306,713
Sole, Dover	2,717,828	\$838,446	3,511,073	\$949,022	2,800,840	\$725,088	4,090,300	\$1,222,750	4,426,800	\$1,237,670	3,030,430	\$838,608	1,697,030	\$460,524
Sole, English	552,522	\$225,427	709,565	\$276,199	851,447	\$288,622	816,786	\$298,244	529,268	\$196,152	469,983	\$169,098	444,771	\$166,659
Sole, Petrale	518,284	\$379,514	517,886	\$403,934	626,626	\$507,523	519,297	\$431,409	349,710	\$284,619	355,043	\$289,769	326,053	\$283,805
Swordfish	41,089	\$167,494	331,202	\$1,185,872	329,133	\$1,124,820	315,794	\$1,282,440	330,626	\$1,159,470	280,568	\$956,032	75,705	\$285,178
Thornyhead	320,080	\$111,812	759,441	\$281,223	841,000	\$321,836	785,696	\$346,588	122,280	\$572,254	986,880	\$479,362	496,797	\$333,821
Tuna, Albacore	362,818	\$312,817	567,558	\$433,882	431,703	\$362,661	560,231	\$410,956	467,478	\$508,045	468,506	\$440,370	145,033	\$133,127
Crab, Dungeness	2,553,941	\$3,820,434	889,045	\$1,494,915	1,016,600	\$2,098,680	911,827	\$1,863,600	661,616	\$1,199,850	394,726	\$678,902	2,122,090	\$3,237,380
Shrimp, Bay	132,951	\$409,280	122,599	\$373,856	151,057	\$489,379	140,555	\$482,137	112,484	\$402,835	71,700	\$307,868	95,163	\$421,187
Urchin, Sea	5,179,818	\$1,715,666	4,896,862	\$2,065,673	5,583,450	\$2,971,000	5,723,970	\$3,977,070	3,918,790	\$2,962,530	1,773,140	\$1,462,140	1,460,780	\$1,334,570
Abalone, Red	117,937	\$449,011	128,100	\$536,470	104,984	\$498,943	76,393	\$380,596	120,019	\$668,466	79,732	\$556,278	68,134	\$585,552
Squid, Market	659,549	\$67,951	7,485	\$1,362	283,960	\$30,669	3,243,940	\$346,348	5,396,700	\$468,563	2,243,940	\$374,893	4,928,500	\$640,241
SF BAY AREA TOTAL	51,495,097	\$39,569,615	49,323,889	\$23,791,917	48,433,000	\$29,286,100	49,765,600	\$31,105,800	44,821,300	\$28,795,000	30,351,000	\$16,264,200	28,292,500	\$19,412,500

The major ports for commercial fish landings in the SF Bay Area are: San Francisco, Bodega Bay, Princeton, Oakland, and Sausalito.

SAN FRANCISCO COMMERCIAL FISH LANDINGS
Dept. of Fish & Game Statistics for Select Species (Table 17)

11-30-95 commfish

Species	1988		1989		1990		1991		1992		1993		1994	
	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value	Pounds	\$ Value
Anchovy, Northern	1,082,430	\$121,587	1,631,260	\$160,288	1,410,970	\$141,735	1,012,330	\$108,090	362,430	\$34,406	537,736	\$108,972	277,966	\$66,121
Halibut, California	112,845	\$257,575	143,778	\$324,461	148,882	\$364,692	193,584	\$461,956	217,744	\$520,789	215,466	\$524,705	177,719	\$444,420
Herring, Pacific	12,322,200	\$3,203,750	12,836,200	\$2,960,990	14,164,300	\$5,970,420	12,712,800	\$6,904,990	10,535,500	\$7,436,200	5,653,710	\$1,412,620	3,215,630	\$1,620,700
Herring, Roe on Kelp	-	-	87,584	\$175,167	185,750	\$1,525,370	115,399	\$968,623	83,698	\$437,681	-	-	55,004	\$109,376
Lingcod	261,635	\$99,828	272,941	\$112,004	370,384	\$139,190	373,039	\$140,373	172,167	\$68,046	186,984	\$81,703	167,680	\$71,523
Rockfish, Bocaccio	425,466	\$166,872	329,177	\$114,674	837,369	\$260,555	500,301	\$161,642	345,582	\$116,437	205,006	\$67,254	126,544	\$49,118
Rockfish, Chilipepper	-	-	-	-	-	-	1,148,150	\$373,507	1,313,940	\$434,725	572,088	\$186,501	463,269	\$180,132
Rockfish, Unspecified	1,133,410	\$376,881	905,786	\$299,288	2,054,740	\$679,591	915,965	\$356,129	576,412	\$244,743	324,147	\$183,952	161,405	\$67,062
Rockfish, Widow	261,551	\$87,568	137,048	\$38,561	703,939	\$212,785	571,013	\$174,558	457,824	\$145,207	104,809	\$30,836	75,532	\$27,183
Sablefish	1,256,620	\$561,942	1,274,680	\$500,096	684,669	\$282,641	527,130	\$280,864	440,585	\$205,702	412,819	\$166,783	328,055	\$249,304
Salmon, Chinook	617,190	\$1,812,880	224,845	\$600,651	247,576	\$744,856	197,050	\$552,336	134,604	\$401,187	75,931	\$183,805	129,205	\$287,187
Sanddab	155,667	\$53,734	118,681	\$37,433	67,349	\$20,490	104,669	\$33,107	103,748	\$33,605	73,724	\$44,278	95,816	\$32,895
Sole, Dover	1,237,580	\$385,854	1,388,700	\$382,242	372,105	\$96,231	861,093	\$253,750	1,101,500	\$321,387	610,354	\$162,859	261,427	\$63,006
Sole, English	304,808	\$126,023	254,202	\$104,767	204,991	\$71,445	215,624	\$80,496	187,271	\$69,837	171,146	\$63,762	157,909	\$61,020
Sole, Petrale	292,471	\$204,120	198,216	\$149,278	147,632	\$115,633	187,477	\$149,261	165,349	\$124,626	157,330	\$119,104	139,874	\$115,354
Swordfish	1,941	\$10,253	155,777	\$540,048	71,376	\$256,043	94,299	\$392,853	17,983	\$62,373	48,038	\$162,195	41,433	\$150,460
Thornyhead	214,935	\$76,033	435,172	\$161,966	222,632	\$85,181	274,806	\$119,071	416,529	\$186,389	378,457	\$171,402	185,433	\$114,062
Crab, Dungeness	527,782	\$819,407	161,330	\$279,145	250,826	\$530,733	178,818	\$369,638	98,200	\$171,566	94,827	\$148,900	609,107	\$928,880
S F TOTAL	21,843,900	\$9,251,350	21,605,400	\$7,517,440	23,255,700	\$12,111,200	21,284,400	\$12,479,500	17,789,200	\$11,498,300	10,501,700	\$4,245,700	7,421,550	\$5,140,300

APPENDIX C.
AIR QUALITY STANDARDS AND DATA

APPENDIX C. AIR QUALITY STANDARDS AND DATA

TABLE AQ-1. STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

<u>Pollutant</u>	<u>Averaging Time</u>	<u>SAAQS /a/</u>	<u>NAAQS /b/</u>
Ozone	1 hour	0.09 ppm /c/	0.12 ppm
Carbon Monoxide	1 hour	20 ppm	35 ppm
	8 hour	9.0 ppm	9 ppm
Nitrogen Dioxide	1 hour	0.25 ppm	NA
	Annual	NA	0.053 ppm
Sulfur Dioxide	1 hour	0.25 ppm	NA
	3 hour	NA	0.5 ppm
	24 hour	0.04 ppm	0.14 ppm
	Annual	NA	0.03 ppm
Respirable Particulate Matter	24 hour	50 ug/m ³ /c/	150 ug/m ³
	Annual	30 ug/m ³	50 ug/m ³
Sulfates	24 hour	25 ug/m ³	NA
Lead	30 day	1.5 ug/m ³	NA
	Calendar Quarter	NA	1.5 ug/m ³
Hydrogen Sulfide	1 hour	0.03 ppm	NA
Vinyl Chloride	24 hour	0.010 ppm	NA

/a/ SAAQS stands for State Ambient Air Quality Standards (California). SAAQS for ozone, carbon monoxide, sulfur dioxide (1-hour and 24-hour), nitrogen dioxide, and respirable particulate matter are values that are not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

/b/ NAAQS stands for National Ambient Air Quality Standards. NAAQS, other than ozone and those based on annual averages, are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

/c/ ppm = parts per million by volume; ug/m³ = micrograms per cubic meter; NA = Not Applicable

Source: California Air Resources Board, *California Air Quality Data Summary*, 1992.

TABLE AQ-2 SAN FRANCISCO AMBIENT AIR QUALITY MONITORING SUMMARY, 1988 - 1993

		Number of Days Standards were Exceeded and Maximum Concentration Measured					
Pollutant	Standard	1988	1989	1990	1991	1992	1993
Ozone							
1-Hour	> 0.09 ppm	0	0	0	0	0	0
1-Hour	> 0.12 ppm	0	0	0	0	0	0
Max. 1-Hour Conc. (ppm)		0.09	0.08	0.06	0.05	0.08	0.08
Carbon Monoxide (Arkansas station)							
1-Hour	> 20. ppm	0	0	0	0	0	0
8-Hour	> 9. ppm	0	0	0	0	0	0
Max. 1-Hour Conc. (ppm)9		9	9	8	9	8	7
Max. 8-Hour Conc. (ppm)6.5		7.5	7.0	5.6	6.5	6.4	5.1
Carbon Monoxide (Ellis station)							
1-Hour	> 20. ppm	0	0	0	0	0	0
8-Hour	> 9. ppm	1	1	0	0	0	0
Max. 1-Hour Conc. (ppm)17		15	14	12	14	10	10
Max. 8-Hour Conc. (ppm)10.0		12.8	9.0	6.9	8.4	7.4	6.9
Nitrogen Dioxide							
1-Hour	> 0.25 ppm	0	0	0	0	0	0
Max. 1-Hour Conc.(ppm)		0.12	0.14	0.11	0.10	0.09	0.08
Inhalable Particulates (PM₁₀)							
24-Hour	> 50 ug/m ³	7/59 ^a	13/62	12/61	15/60	9/61	5/61
24-Hour	> 150 ug/m ³	0/59	0/62	1/61	0/60	0/61	0/61
Max. Daily Conc. (ug/m ³)		117	101	165	109	81	69
Particulate Sulfate							
24-Hour	> 25 ug/m ³	0/61 ^a	0/61	0/61	0/60	0/61	0/56
Max. 24-Hr. Conc. (ug/m ³)		8.6	13.3	8.9	7.9	18.2	12.4

^a x/y indicates that standards were exceeded on x days out of a total of y days on which measurements were taken that year.

conc. = concentration; ppm = parts per million; ug/m³ = micrograms per cubic meter

SOURCE: California Air Resources Board, Summary of Air Quality Data, 1988-1993 BAAQMD Monitoring Stations, 10 Arkansas Street and 939 Ellis Street.

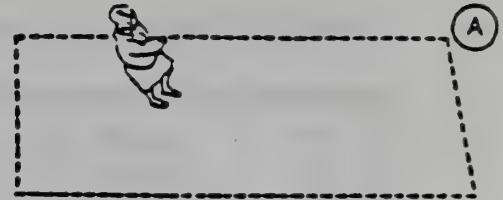
APPENDIX D.
TRANSPORTATION LEVEL OF SERVICE INFORMATION

TRANSPORTATION LEVEL OF SERVICE INFORMATION

LEVEL OF SERVICE A

Pedestrian Space: ≥ 130 sq ft/ped Flow Rate: ≤ 2 ped/min/ft

At walkway LOS A, pedestrians basically move in desired paths without altering their movements in response to other pedestrians. Walking speeds are freely selected, and conflicts between pedestrians are unlikely.



LEVEL OF SERVICE B

Pedestrian Space: ≥ 40 sq ft/ped Flow Rate: ≤ 7 ped/min/ft

At LOS B, sufficient area is provided to allow pedestrians to freely select walking speeds, to bypass other pedestrians, and to avoid crossing conflicts with others. At this level, pedestrians begin to be aware of other pedestrians, and to respond to their presence in the selection of walking path.



LEVEL OF SERVICE C

Pedestrian Space: ≥ 24 sq ft/ped Flow Rate: ≤ 10 ped/min/ft

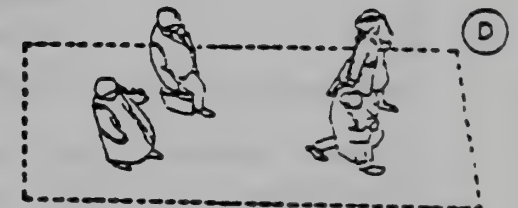
At LOS C, sufficient space is available to select normal walking speeds, and to bypass other pedestrians in primarily unidirectional streams. Where reverse-direction or crossing movements exist, minor conflicts will occur, and speeds and volume will be somewhat lower.



LEVEL OF SERVICE D

Pedestrian Space: ≥ 15 sq ft/ped Flow Rate: ≤ 15 ped/min/ft

At LOS D, freedom to select individual walking speed and to bypass other pedestrians is restricted. Where crossing or reverse-flow movements exist, the probability of conflict is high, and its avoidance requires frequent changes in speed and position. The LOS provides reasonably fluid flow; however, considerable friction and interaction between pedestrians is likely to occur.



LEVEL OF SERVICE E

Pedestrian Space: ≥ 6 sq ft/ped Flow Rate: ≤ 25 ped/min/ft

At LOS E, virtually all pedestrians would have their normal walking speed restricted, requiring frequent adjustment of gait. At the lower range of this LOS, forward movement is possible only by "shuffling." Insufficient space is provided for passing of slower pedestrians. Cross- or reverse-flow movements are possible only with extreme difficulties. Design volumes approach the limit of walkway capacity, with resulting stoppages and interruptions to flow.



LEVEL OF SERVICE F

Pedestrian Space: ≤ 6 sq ft/ped Flow Rate: variable

At LOS F, all walking speeds are severely restricted, and forward progress is made only by "shuffling." There is frequent, unavoidable contact with other pedestrians. Cross- and reverse-flow movements are virtually impossible. Flow is sporadic and unstable. Space is more characteristic of queued pedestrians than of moving pedestrian streams.

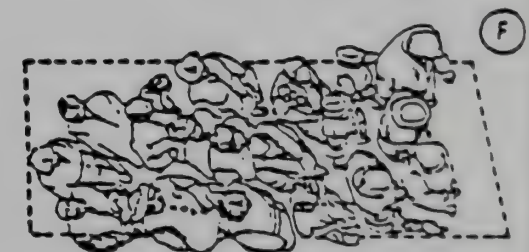


Figure 13-8. Illustration of walkway levels of service.

Source: Highway Capacity Manual, Special Report 209, Chapter 13, TRB, 1985

SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS BASED ON DELAY

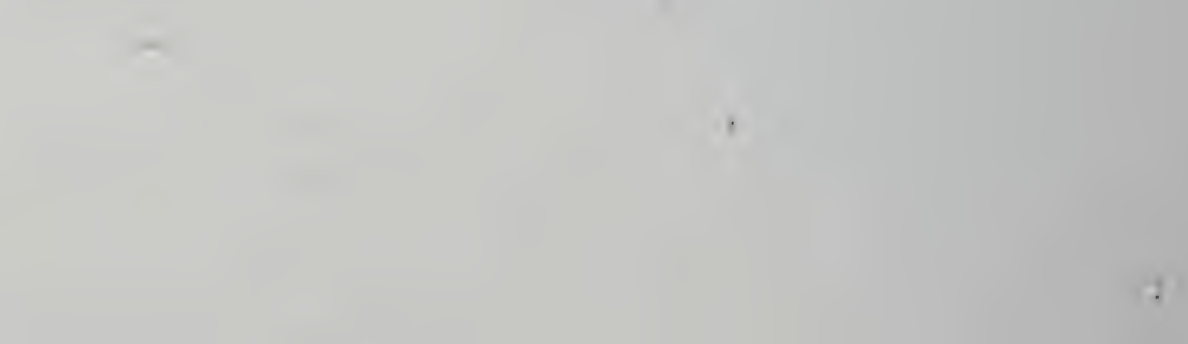
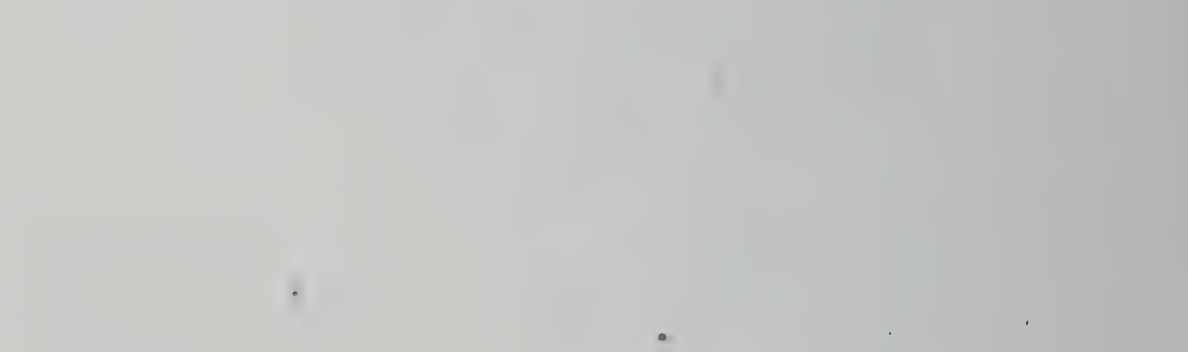
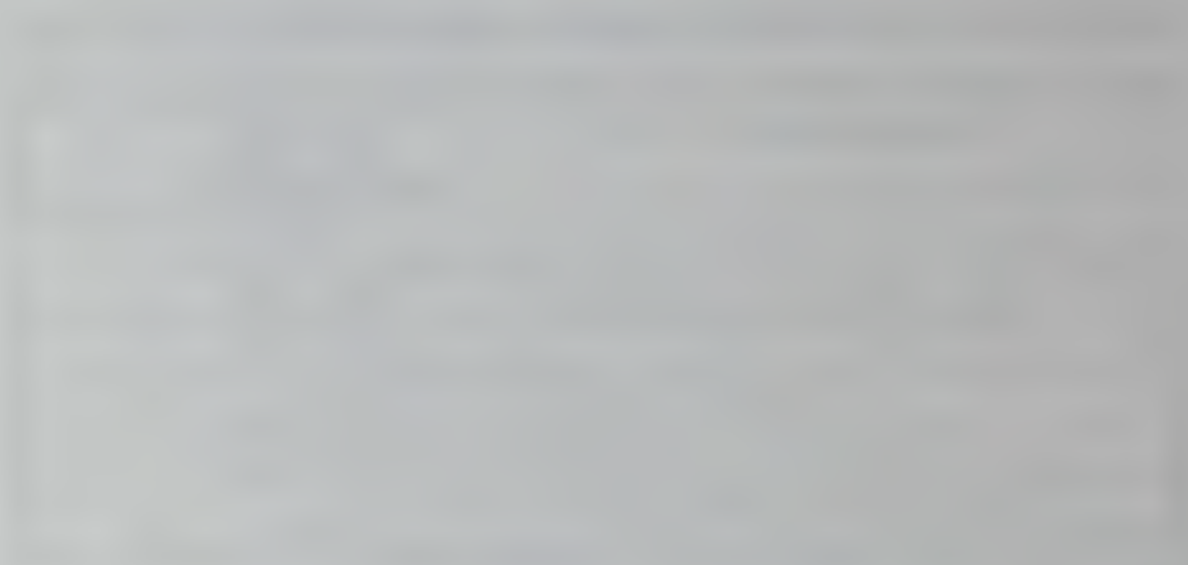
Level of Service	Typical Delay (sec/veh)	Typical Traffic Condition
A	≤ 5.0	Insignificant Delays: No approach phase is fully utilized and no vehicle waits longer than one red indication.
B	5.1 - 15.0	Minimal Delays: an occasional approach phase is fully utilized. Drivers begin to feel restricted.
C	15.1 - 25.0	Acceptable Delays: Major approach phase may become fully utilized. Most drivers feel somewhat restricted.
D	25.1 - 40.0	Tolerable Delays: Drivers may wait through more than one red indication. Queues may develop but dissipate rapidly, without excessive delays.
E	40.1 - 60.0	Significant Delays: Volumes approaching capacity. Vehicles may wait through several signal cycles and long queues of vehicles form upstream.
F	> 60.0	Excessive Delays: Represents conditions at capacity, with extremely long delays. Queues may block upstream intersections.

Sources: *Highway Capacity Manual*, Highway Research Board, Special Report No. 87, Washington, D.C., 1985; *Interim Materials on Highway Capacity*, Circular 212, Transportation Research Board, 1980.

ALL-WAY STOP CONTROLLED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Typical Delay (seconds/vehicle)
A	≤ 5.0
B	5.1 - 10.0
C	10.1 - 20.0
D	20.1 - 30.0
E	30.1 - 45.0
F	≥ 45.0

Sources: Transportation Research Board, Circular 373; Dowling Associates.



APPENDIX E.
HAZARDOUS WASTE BACKGROUND REPORT

APPENDIX E – Hazardous Waste Background Report

SITE HISTORY

The waterfront in the vicinity of the proposed project area was first occupied during the Gold Rush of 1848 to 1860. At this time most of the project area was under water and was subsequently filled with heterogeneous fill. What is known about the fill materials is described below, however the exact quality and nature of the fill are unknown. It may have contained materials such as brick, bottles, wood, unspecified refuse, and debris from the 1906 earthquake and fire mixed with sand. The presence of such materials may be associated with elevated levels of organic and inorganic chemicals.

Hazardous materials may also be present in the soil or groundwater as a results of previous or current land uses. These land uses in the vicinity of the proposed alignment are summarized in Table E-1. Referenced site addresses are shown on Figure 16 (see ENVIRONMENTAL SETTING, Hazards, page 105).

HAZARDOUS SUBSTANCES REGULATORY FRAMEWORK

Hazardous materials and hazardous wastes are extensively regulated by various federal, state, regional, and local regulations, with the major objective of protecting public health and the environment. The major regulations are presented below. This appendix also presents a summary of the agency lists that were reviewed to identify sites that are permitted to generate hazardous wastes or store hazardous materials in underground storage tanks as well as sites where soil or groundwater quality may have been degraded by hazardous substances. The date of each agency list reviewed is identified in Table E-2.

Table E-1
Summary of Historical and Current Land Uses in Vicinity of Harbor Service Facilities

Address	Name	Business/Use	Approximate Date	Source
600 to 680 Beach Street	Selby Smelting and Leadworks	Smelter	1864-1885	2
	Equitable Gaslight Company	Manufactured Gas Plant	1898-1906	1,2
	California Fruit Cannery Association	Cannery	1907-1947	1,2
	Haslett Warehouse Company	Warehouse	1948-1973	1
	Warehouse Service Company	Warehouse	1950-1973	1
	The Cannery	Arcades, Bazaars	1974-1995	1
	Vacant and Office Space	Office	1974-1994	1
Jefferson Street	Railroad	Railroad	1914-?	2
Hyde Street Pier	General Petroleum Corporation	Gas Station	1948-1962	1,3
	Mobil Oil	Gas Station	1963-1995	1,3,4
	Standard Oil Company	Marine Gas Station	1948-1970	3
	Gateway Shipwright	Not Stated	1953-1961	3
	Cattolica & Lindwall	Fish Dealer	1954-1959	3
	Harbor Fisheries	Potential Fish Handling	1955-1970	3
	Refco Engineering Company	Refrigeration	1955-1957	3
	Marine Engine Filters	Potential Oil Usage	1955-1957	3
	US Coast Guard	Rescue Station	1955-1960	3
	US Public Health Service	Quarantine Station	1955-1961	3
	San Francisco State Historical Park	Park	1964-1970	3
	Western Cal Fish, Inc.	Netroom	1964	3
	San Francisco State Historical Monument	Not Stated	1963-1976	3
	Golden Gate National Recreation Area	Historic Ships Unit	1977-1981	3
2905 Hyde Street	Vacant	None	1982-1987	3
	The Maritime Store	Not Stated	1988-1990	3
	Maritime Programs	Not Stated	1991-1995	3
2936 Hyde Street	Oswald Machine Works	Diesel Engine Repair	1948-1971	1,3

See last page of table for notes

Table E-1
Summary of Historical and Current Land Uses in Vicinity of Harbor Service Facilities

Address	Name	Business/Use	Approximate Date	Source
2937 Hyde Street	Alioto Seafoods/Harbor Fisheries	Fish Handling	1980-1994	3
	Consolidated Factors Sea Products	Fish Handling	1995	3
	Stein, Ross S.	Not Stated	1983	3
	Vacant	None	1984-1995	3
2941 Hyde Street	Oswald Machine Works	Engine Repair	1974-1994	1,5
440 Jefferson Street	Alioto Fish Company	Fish Handling	1957-1995	3
	Monterey Fish Market	Fish Handling	1985-1986	3
	Marly Fish Company	Fish Handling	1987-1995	3
	Alioto Lazio Fish Company	Fish Handling	1995	3
440 Jefferson Street	General Petroleum Corporation/Mobil Oil Corporation	Diesel and Gasoline Storage	1935-1994	1,6
490 Jefferson Street	Bell Smoked Fish	Fish Smoking	1948-1983	1,3
	Ocean Deli Gourmet Foods	Not Stated	1982	3
	Larocca A. Seafood	Potential Fish Handling	1983	3
	Data Card Corp Troy	Not Stated	1984	3
	The Greek Fisherman	Potential Fish Handling	1984	3
	Tarantino SP Brokerage/Insurance	Not Stated	1984-1995	3
	Aqua Products	Not Stated	1987	3
	San Francisco Smoked Fish	Potential Fish Smoking	1987	3
	Capital Strategies	Not Stated	1990-1995	3
	Adams E. Insurance and Financial Services	Not Stated	1991	3
	Bohne, Dan & Son	Not Stated	1991-1995	3
	Denticare	Not Stated	1991	3
	Martel Insurance Service	Not Stated	1991-1995	3
	Keogler Morgan & Co.	Not Stated	1993-1995	3
	Conley, Balzer & Steward	Advertising Agency	1954-1972	3
	Conley, Knollin & Strain	Advertising Agency	1974-1975	3

See last page of table for notes

Table E-1
Summary of Historical and Current Land Uses in Vicinity of Harbor Service Facilities

Address	Name	Business/Use	Approximate Date	Source
	Vacant	None	1976-1980	3
	Alexis Tellis LTD	Not Stated	1982-1988	3
	AJT Consultant	Not Stated	1985	3
	Interocean Seafoods	Potential Fish Handling	1985-1987	3
	Levy, Albert D.	Not Stated	1985-1987	3
	Taormina, Anthony	Not Stated	1985	3
	France Foods	Not Stated	1986-1989	3
	Bohne, Dan & Son	Not Stated	1988-1989	3
	Martel Insurance Services	Not Stated	1988-1989	3
	Vacant	None	1990-1995	3
496 Jefferson Street	Hendry, C.J. Company/ Johnson & Joseph Company	Ship Chandlers	1953-1983	3
	Maskell Marine Service	Ship Chandlers	1984-1995	3
498 Jefferson Street	Old Sausalito Restaurant	Restaurant	1953-1974	3
	Curiosity Shop	Gift Shop	1972-1995	3
	Franceschis	Restaurant	1975-1995	3
500 Jefferson Street	Unknown	Printers Storage	1948-1950	1

Sources:

1. Sanborn Maps
2. A Cultural Resources Overview of the Fisherman's Wharf Seafood Center Project Area and Environs, Archaeological/Historical Consultants, March, 1989
3. San Francisco city directories including the Polk Directories and the Haines Criss Cross Directories
4. Site Visit, Mary McDonald, Orion Environmental Associates, June 7, 1995
5. Port of San Francisco Map
6. Site Investigation/Characterization Report, Alton Geoscience, Inc., September 20, 1990

Prepared by Orion Environmental Associates, 1995

Table E-2. Summary of Hazardous Materials Databases Reviewed

Name of List	Responsible Agency	Accronym	Date of List	Number of Sites Identified
National Priority List	USEPA	NPL	Aug. 1994	0
Potentially Contaminated Sites	USEPA	CERCLIS	Aug. 1994	2
Toxic Chemical Release Inventory	USEPA	SARA	Aug. 1992	0
Federal Superfund Liens	USEPA	LIENS	Nov. 1992	0
USEPA Hazardous Waste Generators	USEPA	RCRA	June 1994	44
Abandoned Sites Program	DTSC	CAL-SITES	Aug. 1994	5
California Bond Expenditure Plan	DTSC	BEP	Jan. 1990	0
Hazardous Waste and Substances Site List	CA Office of Planning and Research	CORTESE	Nov. 1990	8
Leaking Underground Storage Tanks	Regional Water Quality Control Board	LUST	Jul. 1994	9
Waste Management Unit Discharge Systems	Regional Water Quality Control Board	WMUDS	Sept. 1994	0
Solid Waste Information System	CA Integrated Waste Management Board	SWIS	Mar. 1993	0
Waste Discharge System	CA Environmental Affairs Agency	WDS	Aug. 1994	0
Emergency Response Notification System	US Coast Guard, US Navy	ERNS	June 1993	0
Underground Storage Tanks	State Water Resources Control Board	UST	Aug. 1994	11

Federal Regulations and Agency Lists Reviewed

The U.S. Environmental Protection Agency (U.S. EPA) is the lead agency responsible for enforcing federal regulations that affect public health or the environment. The primary federal laws and regulations include: the Resource Conservation and Recovery Act of 1976 (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA); and the Superfund Act and Reauthorization Act of 1986 (SARA). Federal statutes pertaining to hazardous materials and wastes are contained in the Code of Federal Regulations (40 CFR).

These laws require that responsible parties report any known hazardous waste contamination of soil or groundwater as defined in 40 CFR to the U.S. EPA. State and local agencies must also be informed. Any contamination that threatens the public health or environment must be remediated by the responsible party according to standards set by the U.S. EPA. RCRA also contains regulations for the safe storage, transportation and disposal of hazardous wastes.

The federally published lists of sites which trace the status of suspected hazardous materials sites or identify sites permitted to generate hazardous wastes include:

- the National Priority List (NPL), which prioritizes sites with significant risk to human health and the environment;
- the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS), which tracks contaminated properties identified under CERCLA and SARA;
- the toxic chemical release inventory which identifies sites which have reported chemical release to the air, water, or land as required by Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA);
- the Federal Superfund Liens list (LIENS) which identifies properties where the U.S. EPA has placed a lien because the U.S. EPA has spent money for remedial action or notified

the potential of liability for remedial action. This list is compiled by the Office of Enforcement and Compliance Monitoring of the U.S. EPA; and

- the Emergency Response Notification System (ERNS) which lists releases of oil and hazardous substances reported pursuant to section 103 of CERCLA; section 311 of the Clean Water Act; and sections 300.51 and 300.65 of the National Oil and Hazardous Substances Contingency Plan.
- the list of facilities permitted to generate hazardous wastes under RCRA.

State and Regional Regulations and Agency Lists Reviewed

The USEPA has delegated much of its regulatory authority to the individual states. The Department of Toxic Substance Control (DTSC) of the California Environmental Protection Agency (Cal EPA), formerly a division of the Department of Health Services, enforces hazardous materials and waste regulations in California, in conjunction with the USEPA. The DTSC is responsible for regulating the management of hazardous substances including the remediation of sites contaminated by hazardous substances. California hazardous materials laws incorporated federal standards, but are often more strict than federal laws. The primary state laws include: the California Hazardous Waste Control Law (HWCL), the state equivalent of RCRA; and the California Hazardous Substance Account Act, the state equivalent of CERCLA. State hazardous materials and waste laws are contained in the California Code of Regulations, Titles 22 and 26.

The published lists of sites which trace identification and remediation progress within the state include:

- CALSITES, which was previously referred to as the Abandoned Sites Program Information System (ASPIS), and identifies potential hazardous waste sites, which are then screened by the DTSC. Sites on this list which are designated for no further action by the DTSC were not identified by the database review;

- the Annual Work Plan, formerly known as the Bond Expenditure Plan (BEP), which is a site-specific expenditure plan for the appropriation of California Hazardous Substance Cleanup Bond Act of 1984 funds; this list is no longer updated.
- the CORTESE List, which is a compilation of information from various sources listing potential and confirmed hazardous waste of hazardous substance sites, previously maintained by the State Office of Planning and Research. This list is no longer updated.

The Regional Water Quality Control Board (RWQCB) is authorized by the State Water Resources Control Board to enforce provisions of the Porter - Cologne Water Quality Control Act of 1969. This act gives the RWQCB authority to require groundwater investigations when the quality of groundwater or surface waters of the state are threatened and to require remediation of the site, if necessary. Both of the RWQCB and the DTSC are part of the Cal EPA.

The RWQCB maintains the following lists identifying hazardous waste sites that were reviewed:

- the Leaking Underground Storage Tanks (LUST) list, which is required by the Health and Safety Code and tracks remediation status of known leaking underground tanks;
- the Waste Management Unit Discharge System (WMUDS) list of sites which tracks waste management units. The list contains sites identified on the Toxic Pits List, which is required by the Toxic Pits Cleanup Act (Katz Bill), and places relatively strict limitations on the discharge of hazardous wastes into surface impoundments, toxic ponds, pits and lagoons (the RWQCB is required to inspect all surface impoundments annually). The WMUDS list also identifies sites targeted by the Solid Waste Assessment Program where there is a possible risk of solid waste disposal sites (landfills) discharging hazardous wastes, threatening either water or air quality.

The RWQCB also maintains other lists of sites that were not reviewed as part of this EIR. These lists include:

- the Non-Tank or Unauthorized Toxic Releases List, which traces the status of other hazardous releases to the environment;
- the Toxic Pits List, which is required by the Toxic Pits Cleanup Act (Katz Bill), and places relatively strict limitations on the discharge of hazardous wastes into surface impoundments, toxic ponds, pits and lagoons (the RWQCB is required to inspect all surface impoundments annually); and
- the Solid Waste Assessment Program targets sites and maintains a list of where there is a possible risk of solid waste disposal sites (landfills) discharging hazardous wastes, threatening either water or air quality.

The Bay Area Air Quality Management District (BAAQMD) may impose specific requirements on remediation activities to protect ambient air quality from dust or other airborne contaminants.

The California Waste Management Board maintains a list of active, inactive or closed solid waste disposal sites and transfer facilities, as legislated under the Solid Waste Management and Resource Recovery Act of 1972. The list is referred to as the Solid Waste Information System (SWIS).

The California Environmental Affairs Agency Office of Hazardous Material Data Management produces a database containing information on sites which have been issued waste discharge requirements (NPDES permits). These sites are allowed to discharge specified levels of chemicals under their waste discharge requirements. This list is referred to as the Waste Discharge Systems (WDS).

The State Water Resources Control Board (SWRCB) also requires permitting of all underground storage tanks (USTs) containing hazardous substances. The California laws regulating USTs are primarily found in the Health and Safety Code; combined with regulations adopted by the State Water Board, these laws comprise the requirements of the state UST program. The laws contain requirements for UST permitting, construction, installation, leak detection monitoring,

repairs and corrective actions and closures. In accordance with state laws, counties are required to implement a UST program and in some cases, the county requirements are more stringent than those of the State. Cities are also given the option to implement a UST program. The Regional Water Quality Control Board may also oversee corrective actions.

Local Regulations

Several agencies within the City are involved in the use and storage of hazardous materials and the disposal of hazardous wastes, The San Francisco Department of Public Health, Bureau of Environmental Health and Hazardous Materials (DPH), is the primary local environmental regulatory agency responsible for enforcement of City, state and federal environmental health codes and regulations. DPH maintains records of underground storage tank modifications and releases of hazardous chemicals from storage tanks, and records where toxic chemicals are used, manufactured and/or stored by San Francisco businesses.

DPH has the authority over monitoring the storage of flammable liquids, which includes underground tanks, and other hazardous materials, The DPH also has a memoranda of understanding with the RWQCB that gives the City local oversight authority over hazardous waste remediation activities.

The DPH maintains the Local Oversight Facilities list which includes underground storage tank sites under the jurisdiction of the Local Oversight Program of the DPH. No additional sites were identified on this list that were not identified on the LUST list.

The San Francisco Fire Department (SFFD), Bureau of Fire Prevention and Investigation, conducts inspections of underground storage tank installations and has permit authority over the storage of flammable liquids. The SFFD also maintains documentation of known above-ground storage tanks.

The Department of Public Works administers the San Francisco Public Works Code, Article 20, "Analyzing the Soil for Hazardous Waste," known as the Maher Ordinance. This ordinance,

enacted in 1986, requires an investigation of hazardous wastes in these soil as a prerequisite for building permits when "the permit for a construction project ... involves the disturbance of at least 50 cubic yards of soil...". In addition, Section 1013 of the Maher Ordinance, construction on City Property, applies the same requirements to improvements on land under the City's jurisdiction, when no building permit is required.

HAZARDOUS MATERIALS WORKER SAFETY REQUIREMENTS

The Federal Occupational Safety and Health Administration (Fed/OSHA) and the California Safety and Health Administration (Cal/OSHA) are the agencies responsible for assuring worker safety in the handling and use of chemicals in the workplace. The federal regulations pertaining to worker safety are contained in the Code of Federal Regulations, Title 29 (29 CFR) as authorized in the Occupational Safety and Health Act of 1970. They provide standards for safe workplaces and work practices, including standards relating to hazardous materials handling. In California, Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations; Cal/OSHA standards are generally more stringent than federal regulations.

The state regulations concerning the use of hazardous materials in the workplace are included in Title 8 of the California Code of Regulations, which contain requirements for safety training, availability of safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information relating to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees at hazardous waste sites.

ASBESTOS ABATEMENT REGULATIONS

Where demolition or renovation work will involve 100 square feet or more of asbestos-containing materials, the State law requires that the contractor be certified and that certain procedures be

followed.¹ Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition permits until an applicant has demonstrated compliance notification requirements under applicable Federal regulations regarding hazardous air pollutants, including asbestos.

The BAAQMD is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement. They are to be notified ten days in advance of any proposed demolition. Notification includes the names, addresses and phone numbers of operations and persons responsible, including the contractor; description and location of the structure to be renovated/demolished including size, age and prior use, and the approximate amount of friable asbestos scheduled starting and completion dates of demolition nature of planned work and methods to be employed; procedures to be employed to meet BAAQMD requirements; and the name and location of the waste disposal site to be used.

According to the BAAQMD Regulation 11, Rule 2, if a structure is to be demolished, friable and potentially friable asbestos must be removed and disposed of properly. Workers and the public could become exposed to asbestos fibers as they become airborne during removal.²

The local office of Cal/OSHA must be notified of asbestos abatement to be carried out. Asbestos contractors must follow the State regulations contained in Title 8 of the California Code of Regulations, Sections 1529 and 341.6 through 341.14 where there is asbestos-related work involving 100 square feet or more of asbestos-containing materials. Asbestos removal contractors must be certified as such by the Contractors Licensing Board of the State of California. Pursuant to California law, the Bureau of Building Inspection (BBI) would not issue the required permit until the applicant has complied with the notice requirements above as well as requirements for proper waste disposal (described below).

¹ Assembly Bill 2040, Asbestos 1985, Added Section 24223 and Chapter 25 to Division 20 of the Health and Safety Code.

² Bay Area Air Quality Management District, Rules and Regulations, Regulation 11, Rule 2, Asbestos Demolition, Renovation and Manufacturing, adopted May 1981.

Office Bulletin No. 88-4 of the San Francisco Fire Department contains local requirements for asbestos abatement to protect against fire hazards. This bulletin requires the use of fire resistive or non-combustible materials for any temporary asbestos abatement structures constructed; limits abatement to a maximum of two floors within a building; requires that exits are maintained in accordance with the applicable requirements of the San Francisco Fire Code; requires maintenance of opening protection for rated shafts in accordance with Title 24 of the California Code of Regulations; requires posting of a notice of asbestos abatement adjacent to the main fire alarm panel; restricts impairment of life safety systems to those floors where asbestos abatement is in process; and requires fire extinguishers in the appropriate locations.

LEAD-BASED PAINT ABATEMENT REGULATIONS

In accordance with regulatory guidance, lead-based paint waste that has been separated from building materials (such as delaminated or chipping paint) must be evaluated separately from other building materials for waste disposal purposes during building demolition. Accordingly, any chipping or delaminated paint would need to be removed before any renovation or demolition activities. Depending on the level of lead identified in the paint, it may require disposal as a hazardous waste. Building materials which still have the paint adhered to them may generally be disposed of as regular construction debris, regardless of the lead level in the paint.

The Lead in Construction Standard contained in Title 29 of the Code of Federal Regulations, Section 1926.62 applies to the removal of chipping or delaminated lead-based paint. In accordance with this standard, it will be necessary for workers to wear respiratory protection until the work is completed or until an employee exposure assessment can demonstrate that air lead levels during scraping are below the permissible exposure limit (PEL). Other applicable requirements of the standard include worker awareness training, use of protective clothing, provisions for change areas and hand washing facilities, biological monitoring, and development of a site specific compliance program. California regulations relating to the abatement of lead-based paint are identical to the Federal regulations.

WASTE DISPOSAL REGULATIONS

All California landfills have been segregated by regulatory authority into the categories of Class I, Class II and Class III facilities. Class I facilities can accept hazardous wastes with chemical levels below the federal land disposal restriction (land ban) treatment standards. Class II and III facilities can accept non-hazardous wastes that meet acceptance criteria determined by the State for organic and inorganic compounds; each landfill has an individual acceptance criteria.

Waste disposal is regulated by the RWQCB and will be predicated on the concentrations of the chemical constituents that are present or the characteristics of the wastes being disposed of. Soil with total petroleum hydrocarbon or organic compound concentrations above the detection limit must be disposed of at an appropriately landfill facility or treated to reduce the levels of chemicals in the soil; the concentration of the compounds present will determine the appropriate type of disposal facility. In general, soil with total petroleum hydrocarbon levels up to 100 milligrams per kilogram can be disposed of at a Class III disposal facility. If the concentration is between 100 and 1,000 milligrams per kilogram and be disposed of at a Class II disposal facility and if the concentration is greater than 1,000 milligrams per kilogram, Class I disposal would be required.

The disposal alternative is also predicated on the total and soluble concentrations of metals. Soil with total metal concentrations that are above the Total Threshold Limit Concentration (TTLC) and soluble metal concentrations that are above the Soluble Threshold Limit Concentration (STLC) must be disposed of at a Class I disposal facility or treated.³ The Class II and III landfills in the Bay Area have acceptance criteria for lead that are lower than the STLC.

³ The total threshold limit concentration (TTLC) and the soluble threshold limit concentration (STLC) are criteria used for waste classification purposes. If the waste contains a total concentration of a constituent and a concentration greater than the TTLC, it is considered a hazardous waste. If the total concentration is greater than ten times the STLC, then it would be necessary to perform a waste extraction test to determine the soluble concentration. If the soluble concentration is greater than the STLC, the waste would be considered hazardous. The waste extraction test involves a ten times dilution of the sample; because of this, it would be impossible for the soluble concentration to exceed the STLC unless the total concentration exceeded ten times the STLC.

Soil with no concentrations of organic chemicals above detection limit and total and soluble metal concentrations that are below the TTLC and STLC may be used on-site or transported off-site as unrestricted waste.

Lead-based paint would be considered a hazardous waste because the total lead concentration would be greater than the TTLC of 1,000 milligrams per kilogram. It would be necessary to dispose of the paint at a Class I facility.

The California Department of Toxic Substances Control has classified friable, finely divided and powdered wastes containing greater than one percent asbestos as a hazardous waste.⁴ A friable waste is one which can be reduced to powder or dust under hand pressure when dry. Non-friable asbestos-containing wastes are not considered hazardous and are not subject to regulation under Title 22, Division 4.5 of the California Code of Regulations. The management of these wastes would still be subject to any requirements or restrictions which may be imposed by other regulatory agencies. The State standard for classification of asbestos wastes is contained in Section 66261.24 of Title 22 of the California Code of Regulations. Asbestos is not currently regulated as a hazardous waste under the RCRA; because of this it is considered a non-RCRA waste. Asbestos wastes totalling more than 50 pounds must be transported by a registered waste hauler to an approved treatment, storage or disposal facility.

Wastes containing asbestos may be disposed of at any landfill which has waste discharge requirements issued by the RWQCB which allow disposal of asbestos-containing materials, provided that the wastes are handled and disposed of in accordance with the Toxic Substances Control Act, the Clean Air Act's National emission Standards for Hazardous Air Pollutants, and Title 22 of the Code of California Regulations (Division 4.5). The Department of Toxic Substances Control also has treatment standards for asbestos-containing wastes which require submittal of a notification and certification form to the land disposal facility as well as wetting and containment of the asbestos-containing materials.

⁴ California Department of Toxic Substances Control, Fact Sheet, Asbestos Handling, Transport and Disposal, October 1993.

It will be necessary to conduct toxicity testing to determine whether any creosote coated piers are considered hazardous. Depending on the results of the testing, the piers may require disposal at a class I or II disposal site.

The owner of properties where hazardous waste are produced or abatement would occur must have a Hazardous Waste Generator Number assigned by and Registered with, the California Department of Toxic Substances Control in Sacramento. The contractor and hauler of the material are required to file a Hazardous Waste Manifest which details the hauling of the material from the site and the disposal of the material.

DREDGING AND SEDIMENT DISPOSAL REGULATIONS

Dredge disposal permits are obtained from the U.S. Army Corps of Engineers which has federal jurisdiction over fill, dredging, and dredged sediment disposal under sections 9 and 10 of the River and Harbors Act and Section 404 of the Clean Water Act. In accordance with the Clean Water Act, the U.S. Environmental Protection Agency reviews the permits and provides comments to the Corps of Engineers on environmental impacts of the proposed dredging and dredged spoils disposal on Bay water quality. The Bay Conservation and Development Commission also issues permits for dredging and disposal.

Under powers delegated by the U.S. Environmental Protection Agency and the State Water Resources Control Board, the Regional Water Resources Control Board certifies compliance of dredging with section 401 of the Federal Water Pollution Control Act of 1972. In March 1987 the Regional Water Quality Control Board adopted Interim Requirements for Dredging Project Monitoring in San Francisco Bay.

Prior to approval of any dredging permit, it would be necessary to conduct sediment testing and comply with the above regulations. The Regional Water Quality Control Board would review the results of the sediment testing to determine whether the dredging would have any impact on Bay water quality. Additional testing may be required until the Regional Water Quality Control Board was assured that dredging and disposal of the dredge spoils at an approved in-Bay

disposal site would not cause an environmental problem. If this determination could not be made, the Regional Water Quality Control Board would make the decision that it would be necessary to find an alternative disposal method for the dredge spoils or that dredging should not take place.

Alternatives to in-Bay disposal include ocean disposal, confined upland disposal, and wetlands creation and beneficial reuse. An approved ocean disposal site has not been established at this time. For confined upland disposal, the dredge spoils would have to meet the acceptance criteria for a Class I, II, or III landfill. Beneficial reuse options include landfill cover, levee restoration and other related uses. Most of the dredge spoils from the San Francisco Bay have been deposited in-Bay at the Alcatraz Disposal Site.

APPENDIX F.
EIR AUTHORS AND CONSULTANTS

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